



US009879232B2

(12) **United States Patent**  
**Yeo et al.**

(10) **Patent No.:** **US 9,879,232 B2**  
(45) **Date of Patent:** **\*Jan. 30, 2018**

(54) **ATTENUATED VACCINIA VIRUS KVC103 STRAIN**

(71) Applicant: **Korea Centers for Disease Control and Prevention, Chungcheongbuk-do (KR)**

(72) Inventors: **Sang Gu Yeo, Seoul (KR); Ho Sun Son, Daejeon (KR); June Woo Lee, Seoul (KR); Seung Bin Cha, Seoul (KR); Sun Hwa Lee, Seoul (KR); Kwi Sung Park, Daejeon (KR); Sang Won Lee, Seoul (KR)**

(73) Assignee: **KOREA CENTERS FOR DISEASE CONTROL AND PREVENTION, Chungcheongbuk-Do (KR)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.  
  
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/883,757**

(22) Filed: **Oct. 15, 2015**

(65) **Prior Publication Data**  
US 2016/0106829 A1 Apr. 21, 2016

(30) **Foreign Application Priority Data**  
Oct. 16, 2014 (KR) ..... 10-2014-0140150

(51) **Int. Cl.**  
**C12N 7/00** (2006.01)  
**A61K 39/12** (2006.01)  
**A61K 39/00** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **C12N 7/00** (2013.01); **A61K 39/12** (2013.01); **A61K 2039/5254** (2013.01); **C12N 2710/24121** (2013.01); **C12N 2710/24134** (2013.01); **C12N 2710/24164** (2013.01)

(58) **Field of Classification Search**  
CPC ..... **C12N 2710/24121**; **C12N 2710/24134**; **C12N 7/00**; **C12N 15/86**; **C12N 2710/24164**; **C12N 2710/24143**; **C12N 2710/24171**; **A61K 2039/5254**; **A61K 39/12**; **A61K 39/285**  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

8,741,308 B2 6/2014 Howley et al.  
9,012,214 B2 4/2015 Tangy et al.  
2012/0328650 A1 12/2012 Chaplin et al.

**FOREIGN PATENT DOCUMENTS**

KR 20040108798 A 12/2004  
KR 20050024359 A 3/2005  
KR 20080032016 A 4/2008  
WO 2010/031837 A1 3/2010

**OTHER PUBLICATIONS**

“Construction of Recombinant Vaccinia Virus: Cloning into the Thymidine Kinase Locus.” Byrd CM, Hrubby DE. Isaacs SN, Ed. In: Vaccinia Virus and Poxvirology: Methods and Protocols. 2004. Humana Press: Totowa, NJ. pp. 31-40. 978-1-59259-789-5. <http://dx.doi.org/10.1385/1-59259-789-0:031>.  
Son HS, Yeo SG, Lee SW. Development of a Recombinant Viral Vector Using the Highly Attenuated Korean Vaccinia Virus Strain, KVC103. Abstract F034. International Meeting of the Federation of Korean Microbiological Societies. Oct. 17-18, 2013. <http://www.msk.or.kr/mskfile/fkms2013.pdf>. p. 264.\*  
Stickl et al. “MVA-Stage Vaccination Against Smallpox,” Dtsch Med Wochenschr 1974; 99(47): 2386-2392. Abstract.  
Hendrickson et al., “Orthopoxvirus Genome Evolution: The Role of Gene Loss,” Viruses 2010, 2, 1933-1967.  
Rosel et al., “Conserved TAAATG Sequence at the Transcriptional and Translational Initiation Sites of Vaccinia Virus Late Genes Deduced by Structural and Functional Analysis of the HindIII H Genome Fragment,” Journal of Virology, vol. 60, No. 2, Nov. 1986, 436-449.  
Yuen et al., “Early promoter-binding factor from vaccinia virions,” Proc. Natl. Acad. Sci. USA, vol. 84, Sep. 1987, 6069-6073.  
Davison et al., “Structure of Vaccinia Virus Late Promoters,” J. Mol. Biol. (1989) 210, 771-784.  
Davison et al., “Structure of Vaccinia Virus Early Promoters,” J. Mol. Biol. (1989) 210, 749-769.  
Chakrabarti et al., “Compact, Synthetic, Vaccinia Virus Early/Late Promoter for Protein Expression,” BioTechniques 23. Dec. 1997, 1084-1097.

\* cited by examiner

Primary Examiner — Rachel B Gill

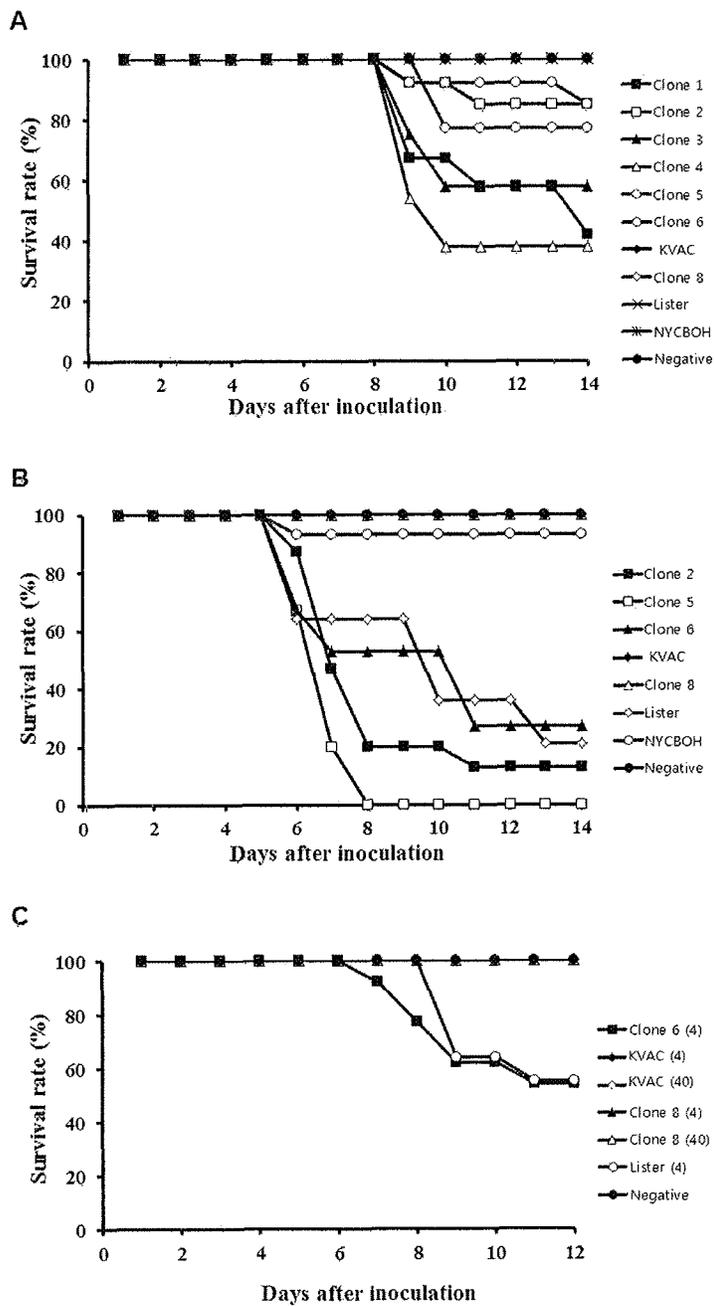
(74) Attorney, Agent, or Firm — RatnerPrestia

(57) **ABSTRACT**

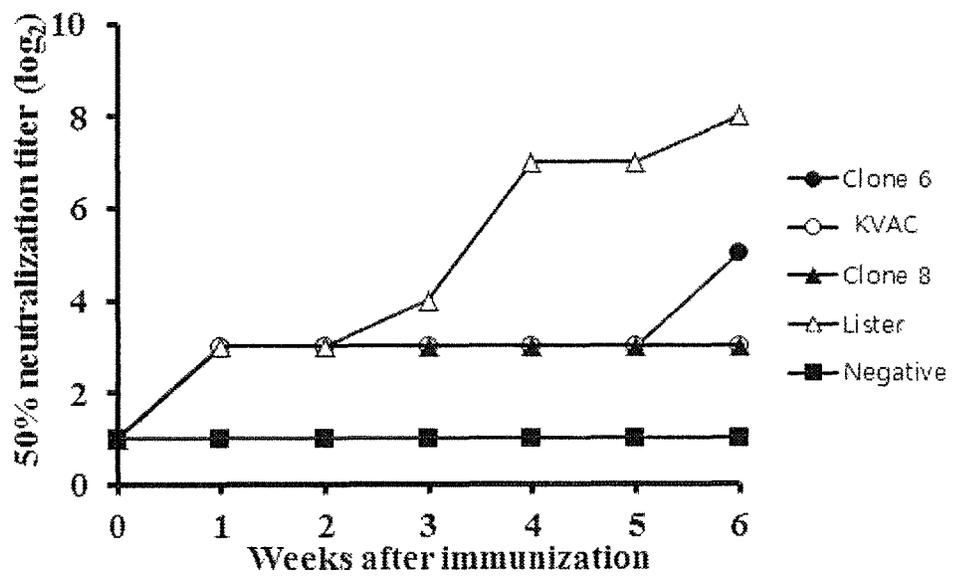
The attenuated vaccinia virus strain KVC103 was obtained by subculturing a vaccinia virus strain 103 times in VERO cells. The attenuated vaccinia virus strain KVC103 has significantly low toxicity, shows reduced skin lesions, and, at the same time, induces effectively immune responses to poxvirus. Thus, it can be used as a poxvirus vaccine while causing less side effects.

**9 Claims, 9 Drawing Sheets**  
**(4 of 9 Drawing Sheet(s) Filed in Color)**

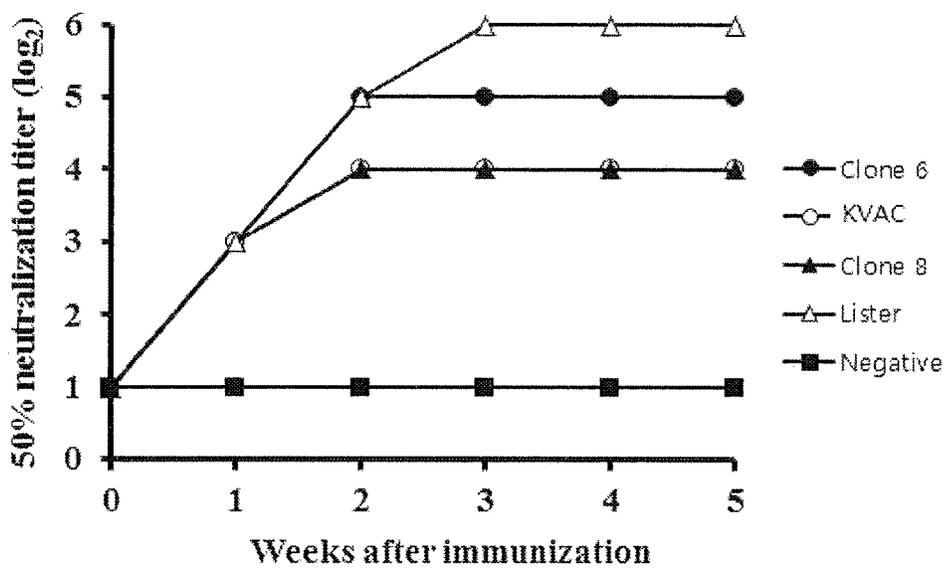
【Figure 1】



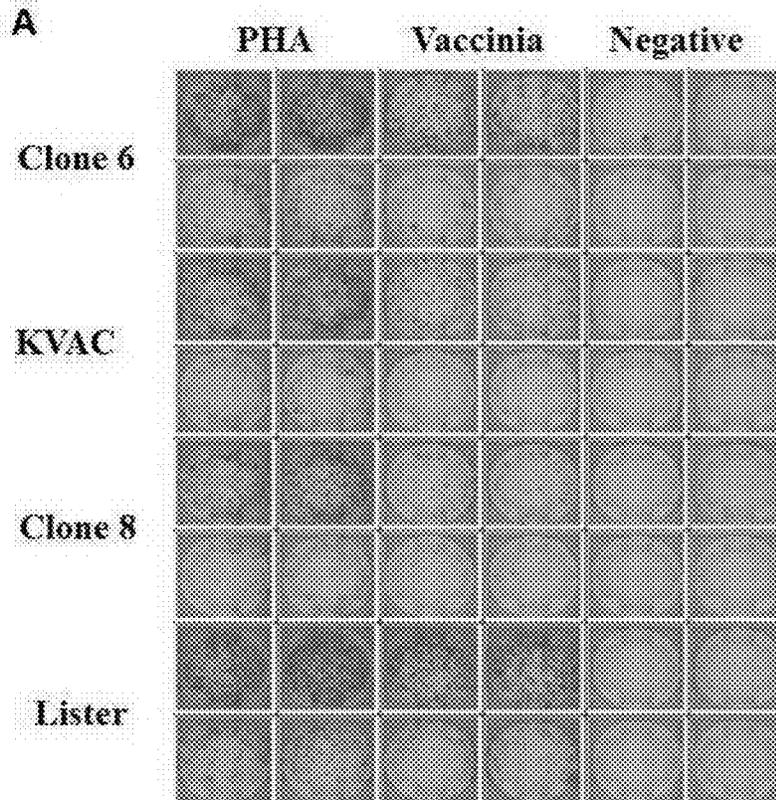
[Figure 2]



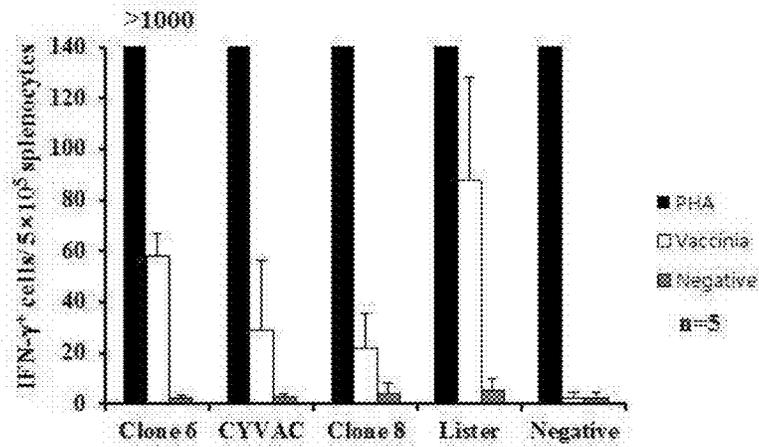
[Figure 3]



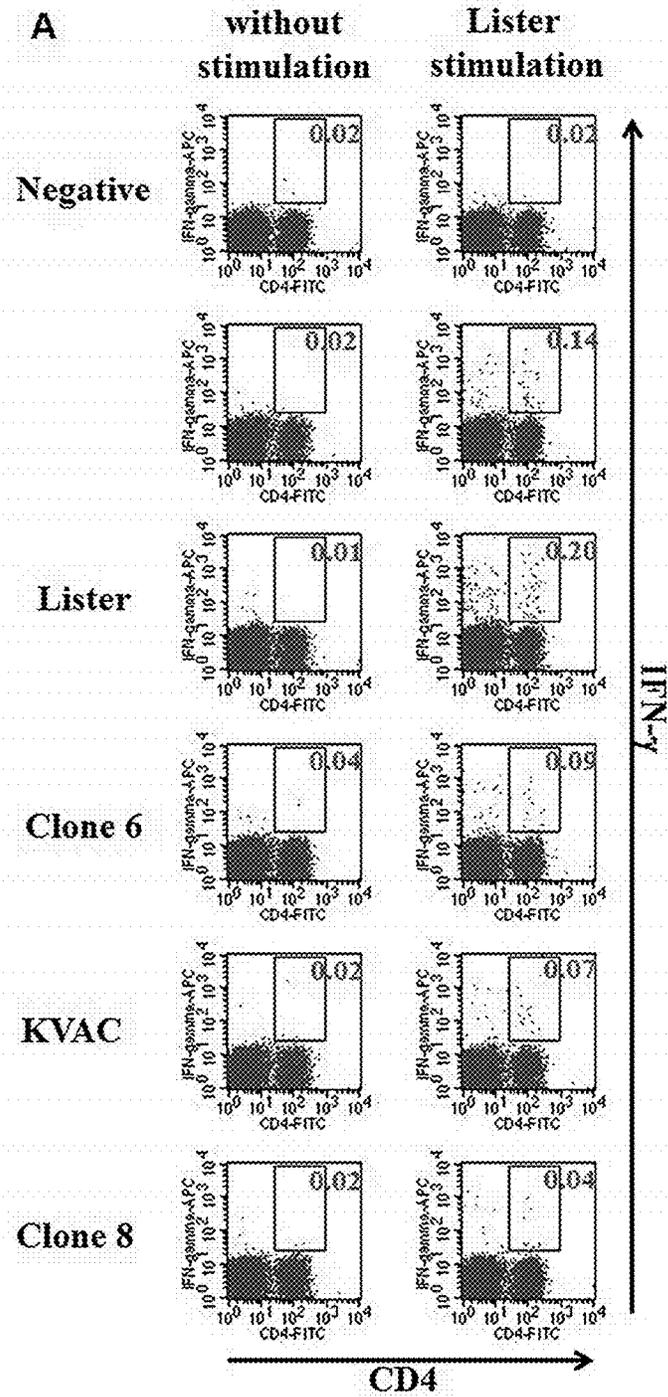
[Figure 4]



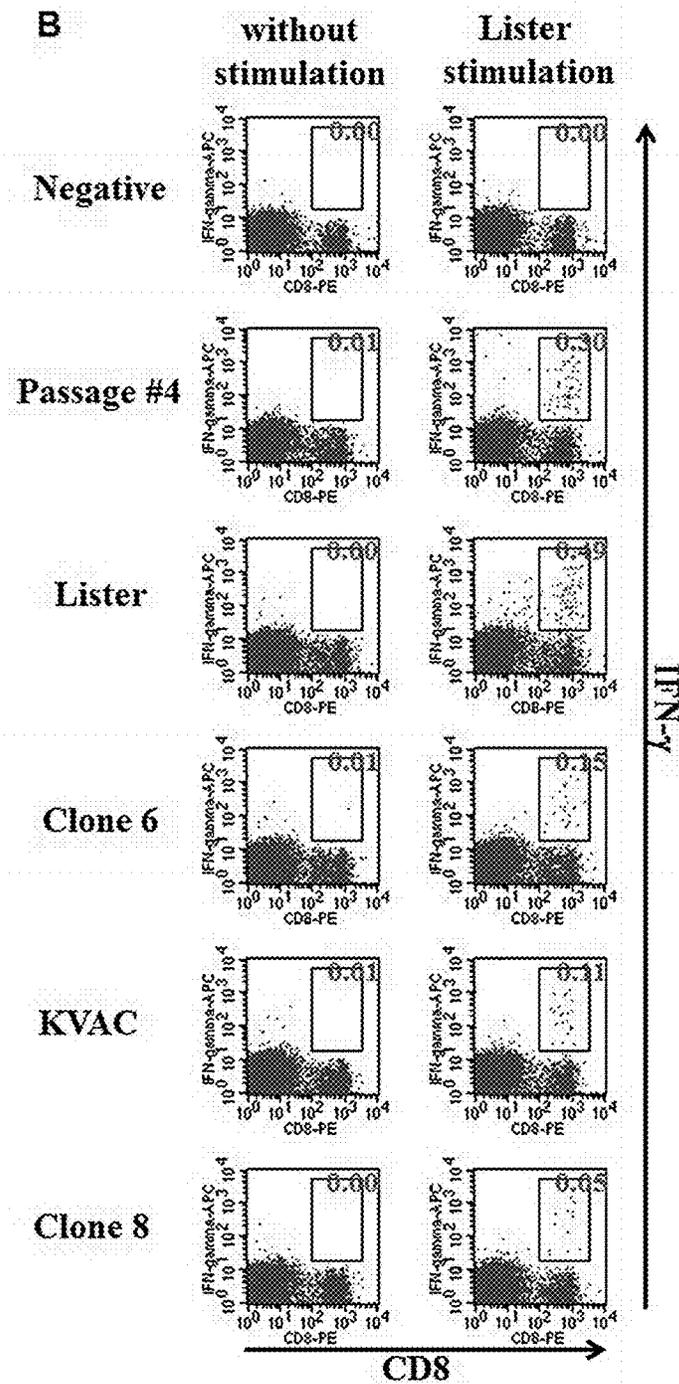
**B**



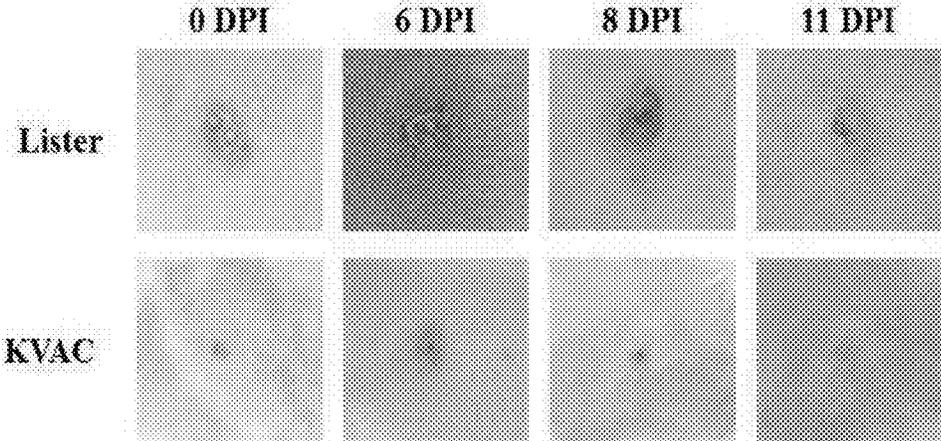
【Figure 5A】



【Figure 5B】



【Figure 6】



## 【Figure 7】

Reference Sequence for analysis is VACV107 (Genbank:DQ121394)

>20k Deletion region [C9L - F3L]

```

                                     15195
VACV107 CATGTCTACTATTTGTGTATTCTTCTAATGGGG TAGCTGTCTCCAATTTTTGCGTAATGGAT
                                     15024
KVAC103 CATGTCTACTATTTGTGTATTCTTCTAATGGGGATTTGGTAGACCTCCTACTACGTATAATTT
                                     34632
VACV107 TCCCCGTGGAACCAACGCTCAACAGATGT GGGATTTGGTAGACCTCCTACTACGTATAATTT
```

19,437 bp deletion compared to VACV107  
( 34,632 - 15,195 = 19,437 bp)

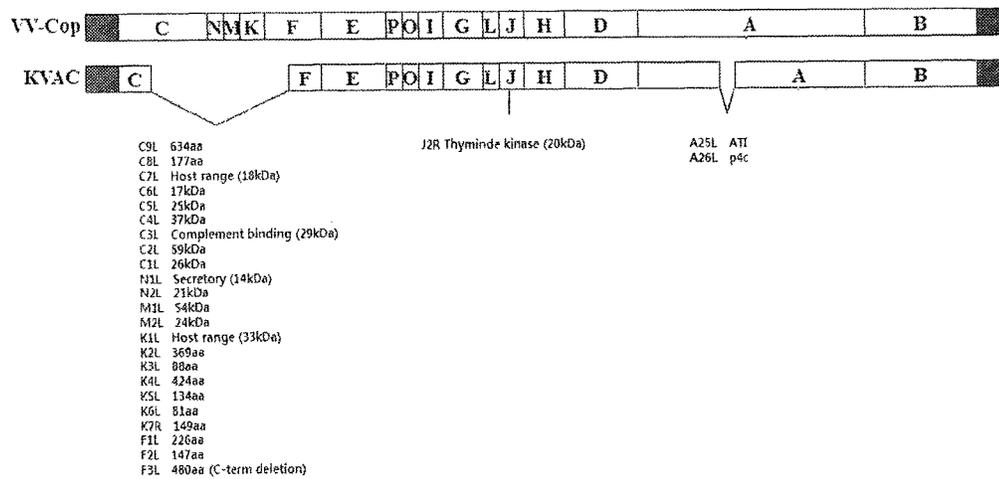
>2.5 kb Deletion region [A25L - A26L]

```

                                     139978
VACV107 AATTAGGATCTTCTAATGGATTGTATGGCTTGATA GCATCATCTTTATCATTATTAGGGGGAT
                                     120359
KVAC103 AATTAGGATCTTCTAATGGATTGTATGGCTTGATAACTTCGTGAATAATGTTTCTATGTTTCTA
                                     142484
VACV107 CATTTTAGGATAGGCTTTCATAAAGTCCCTA ATAACTTCGTGAATAATGTTTCTATGTTTCTA
```

2,506 bp deletion compared to VACV107  
( 142,484 - 139,978 = 2,506 bp)

【Figure 8】



## ATTENUATED VACCINIA VIRUS KVAC103 STRAIN

### CROSS REFERENCE TO RELATED APPLICATION

This application claims priority to Korean Patent Application No. 10-2014-0140150, filed Oct. 16, 2014, the contents of such application being incorporated by reference herein.

### BACKGROUND OF THE INVENTION

#### Field of the Invention

The present invention relates to the novel attenuated vaccinia virus strain KVAC103 having reduced toxicity and side effects.

#### Description of the Prior Art

Vaccinia virus is an enveloped DNA virus which has an about 120-180 kb double-stranded linear DNA genome encoding about 200 different genes (Hendrickson et al., 2010). Each of the genes is composed of a short 5'-promoter, a single ORF encoding a protein without intron, a short 3'-polyadenylation site. These proteins are expressed in a promoter-dependent manner in the intermediate-early (IE), early (E) or late (L) stage of viral infection. The sequences of the early and late promoters have been well characterized through functional experiments (Rosel et al., 1986; Yuen et al., 1987; Davison et al., 1989a and 1989b; Chakrabarti et al., 1997).

Since vaccinia virus was first used as a vaccine for smallpox by Edward Jenner in the 18<sup>th</sup> century, it has become a general term for immunomodulators such that it would give the etymology of the word "vaccine". Smallpox is an acute contagious disease caused by the variola virus. In smallpox caused by the variola major virus, maculopapular exanthema appears after an incubation of 7-17 days (12 days on average), and then progresses to blisters, pus blisters, etc. Smallpox has a mortality rate of 30% or higher, and the survivors are left with scars on the face. The variola virus that causes smallpox belongs to the Orthopoxvirus genus together with monkeypox, cowpox and vaccinia virus. Orthopoxviruses have the characteristic of inducing strong cross-immunity therebetween, and thus a vaccine produced from the vaccinia virus, which is less pathogenic than variola virus, has been used in a global program for the eradication of smallpox. The effect of the vaccine was demonstrated by the 1980's World Health Organization (WHO) declaration of eradication of smallpox (WHO Declaration of global eradication of smallpox, *Wkly Epidemiol Rec* 1980:55:148). The variola virus that causes smallpox is characterized in that: 1) it is stable in an aerosol state; 2) it is easy to mass-produce; 3) it is contagious in a small amount; 4) it is highly contagious among humans; 5) it has a long incubation period of 7-17 days; and 6) it has high mortality rate. Due to such characteristics, there have been concerns over the potential for the variola virus to be developed as biological weapons. Due to the uncertainty over the eradication of smallpox and the danger of developing the variola virus into biological terror weapons, countries have retained smallpox vaccines for use in case of emergency. As is known, in the case of the USA, the first-generation smallpox vaccine produced from cows has been used for some risk groups. Some developed countries including Japan have also taken their own measures, and for example, developed smallpox vaccine by themselves in

order to meet the demand for smallpox vaccines in their countries, or purchased the first-generation smallpox vaccine.

Vaccinia virus used in the early years had a good immunogenic efficacy and greatly contributed to the eradication of smallpox, but people vaccinated with the vaccinia virus sometimes showed serious side effects such as systemic infection or progressive infection. To reduce such side effects, Virulence-attenuated vaccinia virus strains including MVA, NYVAC, and LC16m8 were developed. Among them, modified vaccinia virus Ankara (MVA) as disclosed in Korean Patent No. 1009102970000 is an attenuated virus strain obtained by Subculturing the vaccinia virus CVA strain 500 times or more in chick embryo fibroblasts (CEFs), and it does not proliferate in most mammalian cells and has a 30 kb deleted region in six regions in the genome. This virus showed excellent safety in animal models, and thus have been developed as a smallpox vaccine and a vaccine delivery vehicle by Bavarian Nordic (Denmark). LC16m8, an attenuated virus developed by the Chiba Serum Institute of Japan, forms small plaques and shows reduced virulence. It was found to have a mutation in the B5R gene in the genome sequence. NYVAC is a virus strain obtained by deleting 18 ORFs from five regions containing 18 ORFs in the genome of the Copenhagen strain by a genetic engineering technique, and has been developed as various recombinant viral delivery vehicles.

### SUMMARY OF THE INVENTION

An aspect of the present invention provides a novel attenuated vaccinia virus strain in order to develop a highly pure, safe poxvirus vaccine which can be produced by cell culture.

The present inventors subcultured vaccinia virus 103 times in Vero cells, thereby isolating and identifying the novel attenuated vaccinia virus strain KVAC103 which has excellent immunogenicity while having reduced toxicity due to virulence attenuation.

### BRIEF DESCRIPTION OF THE DRAWINGS

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with the color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 shows the survival rates of 5-day-old suckling mice after selected vaccinia virus clones were inoculated into the brains of the mice in order to compare the safety of the clones.

FIG. 2 shows the results of evaluating humoral immunogenicity by a plaque reduction neutralization test (PRNT50) after mouse immunization with each of selected vaccinia virus clones.

FIG. 3 shows the results of evaluating humoral immunogenicity by a plaque reduction neutralization test (PRNT50) after rabbit immunization with each of selected vaccinia virus clones.

FIG. 4 shows the results of performing ICS (intracellular cytokine staining) to evaluate cell-mediated immunogenicity in mice after immunization with viruses.

FIGS. 5A and 5B shows the results of an ELISPOT immunoassay to evaluate cell-mediated immunogenicity in mice after immunization with viruses.

FIG. 6 shows the results of analyzing the skin toxicity of the attenuated vaccinia virus strain KVAC103 in rabbits.

FIG. 7 shows a comparison between the nucleotide sequence of a deletion region in the genome of the novel attenuated virus strain KVAC103 (corresponding to nucleotide residues 14992-15054 and 120327-120391 of SEQ ID NO: 1) and the entire nucleotide sequence of reference strain VACV107 (corresponding to nucleotide residues 15163-15224, 34601-34662, 139946-140008 and 142453-142516 of SEQ ID NO: 7).

FIG. 8 is a gene map showing the deletion region of the genome of KVAC103.

#### DETAILED DESCRIPTION OF THE INVENTION

Hereinafter, the present invention will be described in detail. However, the present invention can be embodied in different forms and is not limited to the embodiments described herein.

In one aspect, the present invention relates to the attenuated vaccinia virus strain KVAC103 (accession No. KCCM11574P).

In an embodiment of the present invention, the attenuated vaccinia virus strain KVAC103 may be one wherein a gene having a nucleotide sequence represented by SEQ ID NO: 1 is deleted or damaged.

In one aspect, the present invention relates to an immunogenic composition for preventing or treating poxvirus infection, the composition containing the attenuated vaccinia virus strain KVAC103 (accession No. KCCM11574P) as an active ingredient.

In an embodiment of the present invention, the attenuated vaccinia virus strain KVAC103 may be attenuated by subculture.

In an embodiment, the composition may contain at least one pharmaceutically acceptable carrier or excipient.

For preparation of the preventive composition (i.e., vaccine) of the present invention, the attenuated vaccinia virus according to the present invention is converted into a physiologically acceptable form. This can be done based on the experience in the preparation of poxvirus vaccines used for vaccination against smallpox (as described by Stickl, H. et al. *Dtsch. med. Wschr.* 99, 2386-2392 [1974]). For the preparation of vaccine shots, for example, virus particles are lyophilized in 100 ml of phosphate-buffered saline (PBS) in the presence of 2% peptone and 1% human albumin in an ampoule, preferably a glass ampoule. Alternatively, the vaccine shots are produced by stepwise freeze-drying of the virus in a formulation. This formulation can contain additional additives such as mannitol, dextran, sugar, glycine, lactose or polyvinylpyrrolidone or other aids, such as antioxidants or inert gas, stabilizers or recombinant proteins (for example, human serum albumin) suitable for in vivo administration. The glass ampoule is then sealed and can be stored between 4° C. and room temperature for several months. However, as long as no immediate need exists, the ampoule can preferably be stored at temperatures below -20° C.

The therapeutically effective dose of the therapeutic composition of the present invention can vary depending on various factors, for example, an administration method, a target area, the subject's conditions, etc. Thus, when the composition is to be used in the human body, the dose of the composition should be suitably determined by taking into consideration both safety and efficiency. It is also possible to estimate the dose for human administration from the effective dose determined through an animal test. Such considerations to be taken in the determination of the effective dose are described, for example, in Hardman and Limbird, eds.,

Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, 10th ed. (2001), Pergamon Press; and E. W. Martin ed., *Remington's Pharmaceutical Sciences*, 18th ed. (1990), Mack Publishing Co.

The composition of the present invention may also comprise a carrier, a diluent, an excipient, or a combination of two or more thereof, which are commonly used in biological formulations. The pharmaceutically acceptable carrier for use in the present invention is not specifically limited, as long as it is suitable for in vivo delivery of the composition. Examples of a pharmaceutically acceptable carrier that may be used in the present invention include the compounds described in Merck Index, 13<sup>th</sup> ed., Merck & Co. Inc., physiological saline, sterile water, Ringer's solution, buffered saline, dextrose solution, maltodextrin solution, glycerol, ethanol, and mixtures containing one or more of these components. If necessary, the composition may contain other conventional additives such as antioxidants, buffers, bacteriostatic agents and the like. In addition, the composition can be prepared into injectable formulations, such as aqueous solutions, suspensions and emulsions, pills, capsules, granules or tablets, by adding diluents, dispersing agents, surfactants, binders and lubricants thereto. Furthermore, the pharmaceutical composition may preferably be formulated according to each disease or component by a suitable method known in the art or by using the method disclosed in Remington's *Pharmaceutical Science* (Mack Publishing Company, Easton Pa., 18th, 1990).

The composition of the present invention may further comprise pharmaceutically acceptable additives. Examples of pharmaceutically acceptable additives that may be used in the present invention include starch, gelatinized starch, microcrystalline cellulose, lactose, povidone, colloidal silicon dioxide, calcium hydrogen phosphate, lactose, mannitol, taffy, Arabia rubber, pregelatinized starch, corn starch, cellulose powder, hydroxypropyl cellulose, Opadry, starch sodium glycolate, carnauba wax, synthetic aluminum silicate, stearic acid, magnesium stearate, aluminum stearate, calcium stearate, white sugar, dextrose, sorbitol, talc, etc. The pharmaceutically acceptable additives that are used in the present invention are preferably contained in an amount of 0.1-90 parts by weight based on the total weight of the composition, but are not limited thereto.

The therapeutic composition of the present invention may be administered orally or parenterally (for example, intravenous, subcutaneous, intraperitoneal or topical application) according to the intended method. The dose of the composition of the present invention can vary depending on various factors, including the subject's weight, age, sex and health conditions, diet, administration time, administration method, excretion rate and the severity of the disease. The daily dose of the composition according to the present invention is 0.0001-10 mg/ml, preferably 0.0001-5 mg/ml, and is preferably administered once or several times a day.

In one aspect, the present invention relates to a method for preventing or treating poxvirus infection in mammals excluding humans, the method comprising a step of administering the composition of the present invention to the mammals.

In an embodiment of the present invention, the poxvirus may be Orthopoxvirus.

For vaccination or therapy, the lyophilisate of the composition can be dissolved in 0.1-0.5 ml of an aqueous solution, preferably physiological saline or Tris buffer, and administered either systemically or locally, i.e. parenterally, subcutaneously, intramuscularly, or any other administration routes known to those skilled in the art. The mode of

5

administration, the dose and the number of administrations can be optimized by those skilled in the art in a known manner. However, most commonly, a patient is vaccinated with a second shot about one month to six weeks after the first vaccination shot.

Hereinafter, the present invention will be described in further detail with reference to the following examples. It is to be understood, however, that these examples are for illustrative purposes only and are not intended to limit the scope of the present invention.

## EXAMPLES

### Example 1: Establishment of Attenuated Vaccinia Virus Strain

#### 1-1: Subculture of Vaccinia Virus

To make an attenuated vaccinia virus, a Korean smallpox vaccine obtained from the Korea National Institute of Health was used as a parent strain, and subcultured in monkey kidney-derived Vero cells (ATCC CCL-81). Specifically, Vero cells cultured as a monolayer in a T75 flask were infected with 2 ml of the virus for 2 hours, after which the supernatant was removed, and the cells were cultured in 1% FBS-containing DMEM medium for 2-3 days while they were observed. A cytopathic effect (CPE) in the entire cells was observed by a phase contrast microscope, and the virus was harvested. To harvest the virus, the T-flask containing the infected cells was sealed, and freezing at  $-80^{\circ}$  C. and thawing at room temperature was repeated twice to lyse the cells, after which the lysed cells were centrifuged at 1800 rpm for 5 minutes to remove the precipitate, and the supernatant containing the virus was collected. Infection of Vero cells with the virus-containing supernatant and subculture of the cells was repeated 103 times. As a result, viral stock containing various genetic variants was obtained.

#### 1-2: Separation of Attenuated Viral Plaques

Each of the viral stocks of Example 1-1 was serially diluted 10-fold, and Vero cells cultured as a monolayer in a 6-well plate were infected with the diluted viral stock for 2 hours. Then, a 1:3 mixture of 4% agarose gel (Gibco-BRL, Cat#18300-012) and 1% FBS-containing DMEM was overlaid on the cells. Thereafter, the cells were cultured for 3 days, and then stained with 0.06% neutral red dye solution (Sigma, N2889) diluted in DMEM. Based on the results of the staining, plaques thought to have a suitable shape and size were selected, and previously prepared Vero cells were infected with the selected plaques and cultured for 3 days, thereby obtaining clones showing a cytopathic effect (CPE).

### Example 2: Selection of Attenuated Virus Strain

#### 2-1: Examination of Cerebral Toxicity

To compare the safety of isolated vaccinia virus clones selected after subculture, the clones were inoculated into the brains of suckling mice, and then the survival rate of the mice was evaluated. In the experiment, 5-day-old Balb/C suckling mice purchased from Orient Co., Ltd. (Korea) were used. The mice were stabilized for at least two days after purchase but before use in the experiment. Each mouse of each mouse group consisting of 12-15 suckling mice (5 days old) was inoculated with 10 PFU of the virus by an intracerebral route and observed for 14 days. Clones having low toxicity were selected (FIG. 1).

#### 2-2: Analysis of Humoral Immune Response

Mice were immunized by injection with each of the selected vaccinia virus clones. 1, 2, 3, 4 and 5 weeks after

6

immunization, immunogenicity was analyzed by ELISA. Specifically, each mouse group consisting of 5 female Balb/C mice of 4-weeks was inoculated with the virus. Inoculation was performed by a scarification method in which the tail was picked up 3-4 times with a bifurcated needle. Thereafter, clones showing excellent humoral immune activity were selected (FIG. 2).

#### 2-3: Measurement of Neutralizing Antibody Titer

Blood was collected at one-week intervals from the eyeball of vaccinia clone-immunized mice for 6 weeks and from the ear vein of vaccinia clone-rabbits for 5 weeks. Serum was separated from the blood and inactivated at  $56^{\circ}$  C. for 30 minutes. One day before the experiment, BSC-40 cells were seeded in a 12-well plate. The antibody-containing mouse serums was serially diluted 2-fold and were mixed with 50 PFU of the vaccinia virus Lister strain at a ratio of 1:1, and the mixture was incubated at  $37^{\circ}$  C. for 1 hour. Then, the cells were infected with the incubated mixture for 2 hours. After the supernatant was removed, the cells were cultured in DMEM+1% FES medium containing carboxymethyl cellulose (CMC) for 2 days, and then stained with 0.06% crystal violet solution. Based on the results of the staining, the number of the plaques was measured to determine a serum concentration corresponding to a 50% or more reduction in the plaque number (FIG. 3).

#### 2-4: Analysis of Cell-Mediated Immune Response

To analyze cell-mediated immunogenicity, 5 mice/group were inoculated with  $6.5 \times 10^6$  PFU of the isolated virus strain. 4 weeks after immunization, the spleen was taken from the mice, and cells were extracted from the spleen. Using the extracted cells, cell-mediated immunogenicity was evaluated by ELISPOT and ICS (intracellular cytokine staining). Specifically,  $5 \times 10^5$  splenocytes/well were cultured and stimulated with 0.1 MOI of the vaccinia Lister strain in vitro, and the number of splenocytes secreting IFN- $\gamma$  was measured by ELISPOT and ICS (intracellular cytokine staining) (FIGS. 4, 5A and 5B).

As a result, clone 7 (KVAC) showed a decrease in the mouse cerebral toxicity compared to the conventional vaccine strain, had a constant plaque size and shape, and would be highly useful as a vaccine as proven by the immunogenicity test. Thus, this clone was named "KVAC103", and deposited with the Korean Culture Center of Microorganisms (KCCM), in accordance with the Budapest Treaty on the International Recognition of the Deposit of Microorganisms, on Oct. 1, 2014 under the accession number KCCM11574P, that all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of a patent.

#### 2-5: Skin Toxicity Test

To compare safety between the conventional vaccine and the novel clones, each of the selected KVAC103 vaccinia virus and the vaccinia virus Lister strain was inoculated into the skin of rabbits, and then the size of lesions generated after inoculation was compared. As the rabbits, about 2-month-old female New Zealand white rabbits (weight: about 2 kg) were used. Inoculation of the rabbits was performed similar to inoculation of humans. Specifically, an area having a diameter of 5 cm or more on both sides of the back was shaved, and the shaved skin was inoculated with  $10^5$  PFU of the virus by a scarification method in which the skin was lightly picked 10 times or more with a smallpox vaccine inoculation device (bifurcated needle). Then, the skin was observed for 2 weeks. As a result, it could be seen

that the skin toxicity of the attenuated vaccinia virus strain Kvac103 of the present invention was very low (FIG. 6).

### Example 3: Characterization of Attenuated Vaccinia Virus Strain Kvac103

#### 3-1: Analysis of Entire Genome Sequence of Kvac103

To analyze the nucleotide sequence of Kvac103, PCR amplification was performed. A vaccinia virus reference sequence for primer design was used based on the genome sequence (Genbank: DQ121394; 189,421 bp) of the VACV107 strain. The primers used were designed such that PCR products of the entire nucleotide sequence would be produced with a size of about 1,000-1,500 bp and the calculated melting temperature ( $T_m$ ) would be between 53° C. and 55° C. (Table 1). For PCR amplification, the genomic

DNA (20 ng/ $\mu$ l) of the virus was used as a template, and 10 pmole of each primer, 2.5 U of Taq polymerase (Cosmo-genetech, Korea), 1 $\times$  buffer and dNTP (each 2.5 mM) were mixed with distilled water to a total volume of 50  $\mu$ l and used in PCR amplification. The PCR reaction was performed under the following conditions: 95° C. for 3 min; and then 35 cycles, each consisting of 95° C. for 1 min, 50° C. for 30 sec, and 72° C. for 80 sec; and then 72° C. for 3 min. Each of the PCR products was electrophoresed on agarose gel, and then the electrophoresis product bands were excised. Each PCR product was purified using a gel elution kit (Cosmogenetech, Korea), and the entire nucleotide sequence of Kvac103 was determined using both end primers. As a result, the entire nucleotide sequence (167122 bp) of Kvac103 could be determined, and the determined nucleotide sequence is shown in SEQ ID NO: 1.

TABLE 1

PCR product No.	Primer name	Sequence (5' ->3')	$T_m$ (° C.)
1	1-23F	GGT ACA CTT TTT TAA TTC GTG GT	53.1
	1223-1200R	AAG ATT CTT CCT CCA AAC AGT TAA	53.6
2	1102-1125F	GTA GTC TTG AGT ATT GGT ATT ACT	53.6
	2328-2305R	ATA AGA TAG ATT CCA TCA TCG TGA	53.6
3	2217-2237F	TGT CTG TCT GAA TGT ATG GCT	53.9
	3446-3423R	TTC TGT CAA CAA TGT CTG TCA TAT	53.6
4	3327-3347R	TGT AAT GGA GAG TTA CCT CGT	53.9
	4563-4544R	TAT CCT CTG CAC GAC TAC TT	53.4
5	4454-4474F	GCC ATT GTT CGA TAC GTG ATT	53.9
	5679-5656R	AGA ATA GCT ATG GAT TAT TGT GGT	53.6
6	5565-5588F	TTG ATA AGT TGT GAC ACG TTT CAA	53.6
	6700-6677R	CCT ATT AAA GGA GTA TGT CAT GAA	53.6
7	6584-6607F	GCT AAA GCT ATC TAT ACT ATC AGA	53.6
	7823-7803R	ATG GCT TAT TAT CGA GGA GAC	53.9
8	7697-7717F	CAT TAC GAT AGT ATG CAG GCA	53.9
	8906-8886R	TCG GAG GAT TCT CTA TTA TCG	53.9
9	8759-8783F	TTA GTA GAT AAC ATA CCA CAC CAT T	54.0
	9995-9976R	TCG ATA GCG TTA CCA CTA TC	53.4
10	9878-9898F	ACA CAC ACT GAG AAA CAG CAT	53.9
	11041-11020R	CAA TTG CCG TTC TAG ACA TAT C	54.4
11	10892-10915F	CAA CCA AGT AAT GAT CAT CTA TTG	53.6
	12106-12083R	GGA TAA TGC ATA CTG TTA GTC TTA	53.6
12	11993-12012F	TCG CGG ATA TGG AAT TCG AT	53.4
	13227-13204R	CAA GAT GAG AAT CCT ATT TCT CAT	53.6
13	13115-13138F	ATT CTC CAG AAG ATG TTA CAA TGT	53.6
	14336-14313R	AAT GTG TAG TAT TGT ACC ACT ATG	53.6
14	14223-14246F	CCG AAT GTC ATA TAC TCA ATT AGT	53.6
	15466-15443R	CAT GAT GGT AGT AAT AAA GGA TCT	53.6
15	15365-15385F	ACC TCC GTT AAT ACC TCC ATT	53.9
	16607-16584R	GAT GAA GGA GCT ACA TTA TAT AGA	53.6
16	16472-16496F	GGT TAT CAT CAT TGT CAT TAT CTA C	54.0
	17714-17691R	ACT AAT AGT ACT GAC ACT ACA GTA	53.6
17	17577-17600F	TAT CTT ATC GTT AAC CAT GAT TGG	53.6
	18818-18798R	GTT GGC TTA TTC CAT AGT AGC	53.9
18	18696-18716F	CTG AAT GGA TGA ACG AAT ACC	53.9
	19937-19917R	GAG AGA ATG GAT TAT GTG TGC	53.9

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'→3')	T <sub>m</sub> (° C.)
19	19793-19816F 21023-21000R	ATT GGT CTG TGT TAC ATA TCT CTT CGA CAC AAT AGA TAT ATC TGA TTG	53.6 53.6
20	20882-20905F 22126-22106R	CAC ATT ATC ATC TGT TAG AGT AGT GTA ACT CAT AAG TCA CTG CCA	53.6 53.9
21	22019-22039F 23257-23236R	ATG TTA TCC TGG ACA TCG TAC CTA TAT AAT GCG TCG ATG TCA G	53.9 54.4
22	23133-23153F 24366-24342R	TTT ACG TTA ACG TCT TCG TGG GAT CTA ATG ATT GAT CTA TAT GGT G	53.9 54.0
23	24298-24318F 25496-25479R	GTA CTC ATT ATC ATT CGG CAG CTT TGT ACT TAT GCA TCC GGA	53.9 53.9
24	25392-25415F 26638-26618R	AAT ACT TCG TAA GAT ACT CCT TCA ATG CTA CAA GCT ATC GAA CCT	53.6 53.9
25	26522-26542F 27770-27745R	TGG AGA GTA TCC TCT ATG AAG CGA CAT TAA TAT CTA TTC TGC TAA TC	53.9 54.4
26	27661-27684F 28899-28876R	TTG TAT AGG AGT CAG ACT TGT ATT ATG ATG GCT CCT AGT ATG TTT AAT	53.6 53.6
27	28785-28805F 30018-29998R	CTT GTT CGT CGA CAT CTA TCT GGC AGA GTA TAC GAG AAT GAT	53.9 53.9
28	29926-29946F 31182-31163R	ATG CAT CTT AAC ACT CTC TGC AGG AGT ACG AGT TAG AGT AG	53.9 53.4
29	31055-31075F 32309-32289R	TAT GAA GAA CTC CTC CTA GGA CGT CTC CTT CCT CTA TAT TGA	53.9 53.9
30	32188-32211F 33442-33419R	GCA CTC ATG ATT CAC GTT ATA TAA TAG CAA TAA TGT TGA TCA CGA CTA	53.6 53.6
31	33346-33369F 34553-34533R	CGT TGA TAG ATA ATC GAG TAT GTT GAT TCC AAT TCC TCC GAT GAA	53.6 53.9
32	34440-34459F 35657-35637R	AAC CAA CGC TCA ACA GAT GT ATA GAA TTC GTC GCG GAT AGA	53.4 53.9
33	35576-35596F 36865-36846R	CCA TGA AAT CAA ACG GAT TGG ATA TCC AAC AGA GTC GCT AG	53.9 53.4
34	36712-36732F 37933-37913R	GGA TTC ACA AAT GTT ACG CAC TTA ATA TGA CGC TCG TCA TGG	53.9 53.9
35	37832-37852F 39090-39067R	TGT AAC ATC CTT CTC TTC CCT GCA TTA GAA GAA TTC ATC ATG TGT	53.9 53.6
36	39014-39034F 40269-40249R	ATT GGG TGA AGA ATG GAA ACC ATG GGT GTT GCC AAT GAT TCA	53.9 53.9
37	40117-40137F 41346-41326R	TAA CAA TCT AAC TGA CGG AGC GCA TTC CAT CGA GAT CAA AGA	53.9 53.9
38	41165-41185F 42423-42403R	GGA TAC GAA GAT GCT ATC CAT TAT ACT GGC CCA ATA ACT GTG	53.9 53.9
39	42336-42356F 43516-43496R	TAC GCA TCC ATC CAA ATA ACC AGT CGA CGA CGA ATA TGT TCA	53.9 53.9
40	43372-43391F 44611-44591R	GCT AGA TAC CCA ATC TCT CT TAG ACG AAG ATG ACA TCA TGG	53.4 53.9
41	44505-44525F 45678-45655R	CGA TTC TAG AAT ATC ATC GGC GAT AGT TAA TTC CAA TGT TAC GTG	53.9 53.6
42	45506-45526F 46835-46816R	GAT TAT CCA ATT GAG AAG CGC GAC ACA TCG TGT GAT TTC GA	53.9 53.4
43	46697-46717F 47961-47933R	CAC ATA AAC CTC TGG CAC TTA AAT AGG AAT CCT GAT CAG AAT ACT T	53.9 54.0

TABLE 1-continued

PCR product No.	Primer name	Sequence (5' -> 3')	Tm (° C.)
44	47863-47886F	ATA TGA TAT TCG TTC ACA CTA GGT	53.6
	49107-49084R	CTA TAC ATT CTA CGT TAG TAA TGG	53.6
45	49021-49041F	TAT CGA TGT CGA TCT CGT CTA	53.9
	50317-50294R	TAC GTC ATC ATT AGA TTC TGA TTC	53.6
46	50182-50205F	ATA CTA GTC GCG TTA ATA GTA CTA	53.6
	51395-51372R	ATG TGA TAT GAT TAA GGG TAC TAG	53.6
47	51220-51240F	AGT TAG GAC ACG GTG TAT TGT	53.9
	52462-52442R	GAG GGT ATC TTC TTC AGA TTC	53.9
48	52214-52237F	ATT CGT TAT AGA ATG CAT CCA ATG	53.6
	53487-53467R	CTA TGC CTG TAT CTT TCT TGC	53.9
49	53302-53325F	GAG AAC TTA TAG GCG TAA ATT ATG	53.6
	54575-54555R	ATC CGT CTT GGT TAG ATG GAT	53.9
50	54432-54452F	CCT AGT ATT CTT CCA TCG CTA	53.9
	55722-55699R	ATT ATA GAT TGG AAT GGA AGT CAG	53.6
51	55623-55643F	GTT CTC TGG TAG ATA CGT ATC	53.9
	56898-56878R	TCC GTG TTT ACA GAG ATA GAC	53.9
52	56764-56784F	CAG ATT CTT ATA TAC CGC CTC	53.9
	57989-57969R	CCA CAG GTA ATT ATG TGA CTG	53.9
53	57873-57896F	ATG TAT CAT TAG GTA AAG TAG GAC	53.6
	59155-59135R	GGA TGT TCG GTG CAT TAA TTG	53.9
54	59075-59094F	TCA CCA TTT CGA CAT CTG GA	53.4
	60342-60322R	CTT AAT CGG TCA ACG ATG TTG	53.9
55	60225-60245F	TCC GTA TAC CAA CAT GTC TGA	53.9
	61479-61459R	TGA GAA TGT AGT CAA GGC TAC	53.9
56	61360-61380F	GTA GCT CCT ACA GGA ATA TCT	53.9
	62639-62618R	GAC GAA TCG TCA ATC TAT GTG	53.9
57	62523-62543F	AGC GTT CGT CAA CAT ACT ATG	53.9
	63785-63765R	TTG GCC AAG GCA ATT ATC ACA	53.9
58	63656-63676F	TAT CTC CAG AGA GTC CGA TAA	53.9
	64896-64876R	GTG GAA CCG TAT ACC AGT AAT	53.9
59	64772-64795F	CTA TTC TTG ATC TCA TCA TTC CAT	53.6
	66069-66049R	GAT GAT AGC ATA GAG GGT ATC	53.9
60	65949-65968F	TAC CGG AGA TAT AGC TTC CA	53.4
	67260-67240R	GCG TCT AAA CAC AAT CTT GGT	53.9
61	67125-67148F	AAC TGG AAA GCT AGA CTT GAT TAT	53.6
	68325-68302R	CTA TTT AAC TTG CAA GAT CTA TCC	53.6
62	68164-68188F	AGT TAT TCA TCG TCG TCT ACT ATT	53.6
	69504-69481R	TGT AAG AGA ATA CAT TAA CGC AGT	53.6
63	1-24F	CAT CTA TAT TGC TAC ATA ATC CAG	53.6
	1224-1200R	CAT TCT GGA AGA TGG ATT TAT CTT A	54.0
64	1102-1120F	GAT GAC AGG GAA CGG CTA A	54.9
	2321-2299R	CCA ATC TAT TGA GCA AGA ATA CC	54.9
65	2199-2222F	CTT TTG TAG ACA CGA CTA AAC ATT	53.6
	3438-3415R	ATA TCG GGA TCG AAT ATC GTA ATT	53.6
66	3302-3324F	TTA CCG TTT GTA CTT ACT GGA AT	53.1
	4530-4510R	TTA TAA CAC GGC CGT ATA CAC	53.9
67	4418-4440F	GAA CAT GTA GAT TTA TCG GAG GA	54.9
	5613-5591R	CTT CTT CCA TAA ATC CGG TAA CA	54.9
68	5499-5519F	CAA GAC GTT AGA GAC AAG AGA	53.9
	6732-6710R	TGT TAA GTT ACG TTG AGG TTC TA	53.1

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'->3')	T <sub>m</sub> (° C.)
69	6571-6589F	GTG TTC CAA CTC GTG TGC T	54.9
	7801-7781R	GGT GAG CCT ATT ATA GTA GCT	53.9
70	7684-7707F	CAT ATG TGG TAT TCA CTA TAT CAG	53.6
	8924-8904R	CAG TAT TAC CAG GAG TCT TCA	53.9
71	8811-8830F	CCG TCA TTC ATC TAG AAT GG	53.4
	10043-10021R	ACA TGA CAA TCT TAA TGA GGA AG	53.1
72	9909-9929F	GAG TGT TCG AAT GCC AAT GTT	53.9
	11093-11075R	GGT CGA AGT ATA GCA GGA C	54.9
73	10991-11012F	CTG ATC GTC TAG ACG ATA TAG T	54.4
	12230-12208R	ACG AGG TGA TAG AAA TAT ACC AG	54.9
74	12113-12134F	ATC TTG TTT CGG TGG CTG ATT A	54.4
	13350-13329R	GAT GTT TGA GTT GTC ATC CAT G	54.4
75	13227-13250F	ATA TGT TCT TCA TGC CTA AAC GAA	53.6
	14404-14382R	CTA CAC ACC GAT TGA TAC ATA TC	54.9
76	14292-14314F	CTA ACT GCT GTG TGT ATG AAA TG	54.9
	15530-15505R	ATA CTC TAT ATC GGT AGT ATA TCT C	54.0
77	15401-15423F	GTT AGT CAT GAA CCA ATA CAA CG	54.9
	16632-16607R	CAT GAC TAA TGA TAA TAT CTG TAG CA	54.4
78	16504-16529F	GAA ATT TGA TTG TAT ACT TTC GGT TC	54.4
	17742-17721R	TAG CTC TGA TAG ATG AAG CGA T	54.4
79	17628-17648F	CAT TTA TTG CCT GGT GAT TGG	53.9
	18818-18801R	CAG TGT TCC GGT ACG TGA	54.3
80	18672-18690F	CCA GAC TCT AAG GAT CCA G	54.9
	19900-19880R	TGA TTG AAG TCG TCA TAT CCC	53.9
81	19779-19801F	GAA CCG GAA GAA TTG AAT CTT AG	54.9
	21014-20995R	: TTG TAC GCC TAC TAT AGC CT	53.4
82	20879-20900F	TCC AGT TGA ACG TAG TAG TAA G	54.4
	22110-22086R	ACG ATA ACG TTA TTG AGG ATA TTA C	54.0
83	22075-22096F	GAC GAA GAA ACG TAA TAT CCT C	54.4
	23297-23275R	CAT CTC CGT GGT TAT ATA CGA TT	54.9
84	23180-23201F	ATC CAA TTC CTC CGG CAT TAT A	54.4
	24401-24380R	ACC AGA GAT TAA GAA GAT ACC G	54.4
85	24273-24294F	GGA ATA CCG ATG TGT CTA CAT A	54.4
	25490-25469R	TTA ACG ATA TTG TCG GTA GCC A	54.4
86	25371-25389F	AGA GCT CGA TGA TAG CGA C	54.9
	26593-26572R	CGT GAT CTA CGA CTA TAG ATA G	54.4
87	26485-26506F	AGA GCT TAT ATG GCA ACG ACT A	54.4
	27709-27689R	CAG AGA TGT ATT AGG CCT TGA	53.9
88	27560-27584F	CGA CTA GAA TTA GTC AAT CTT ATT C	54.0
	28769-28748R	CAT TAT TGG CGT ATT GAT GTC C	54.4
89	28658-28682F	GGA AAT CAA CAT AAT ATC ATA GTC G	54.0
	29866-29846R	ATG AAC AGG CCA GAT GTT ATC	53.9
90	29751-29769F	GGA CCT TCC AAC TGT GGA T	54.9
	30981-30963R	GGA TCT ATA CCG CAC ACA C	54.9
91	30871-30889F	AGT AGC CAG TTG GCT GCT A	54.9
	32100-32079R	CCA CGT AAG TGA ATA GGT AAT C	54.4
92	31999-32017F	CTC TTC GGG TTG TAG GTA C	54.9
	33213-33192R	CAA TGA CAC AAG GTT CTG TCA A	54.4
93	33088-33110F	CAT TTA TCG CTA ACA TGC ATT TG	53.1
	34315-34295R	ATC ACG GTC ATA AGT TCT CCA	53.9

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'→3')	T <sub>m</sub> (° C.)
94	34205-34228F	CGA TAA CGT CAT TAA TTA TAA CGG	53.6
	35439-35416R	GAC ATC TCT TGA AGA ATA GAG TAT	53.6
95	35321-35345F	AAC GAT TAC ACA CAG GAT GAA TTA A	54.0
	36556-36536R	TTG TCG TCG TCT AAT CAT GAG	53.9
96	35321-35345F	AAC GAT TAC ACA CAG GAT GAA TTA A	54.0
	36556-36536R	TTG TCG TCG TCT AAT CAT GAG	53.9
97	36433-36453F	AGG TAG TTG CTG CTC GTA TAA	53.9
	37613-37591R	ACT GTT ATA CGT TCA TCA CTT TC	53.1
98	37498-37519F	ATC GAT CCT CAC TTT GAA GAG T	54.4
	38693-38675R	GGC GTA GAT GGT CGA GTA T	54.9
99	38538-38561F	CAT AGA GGA TGT TAT TAC GAA TCA	53.6
	39797-39774R	TGT TCG TAC ATA GTT AAT AAC GAG	53.6
100	39605-39626F	TAG TAG CCA TAC GTC TCA GAA T	54.4
	40834-40816R	CGT AAG CGA TAG CTG GTT G	54.9
101	40703-40723F	ACA CTG TTC ACA TCC TTC CAA	53.9
	41935-41912R	AAT CTT TGC TCA CAT ATC ACA TAG	53.6
102	41825-41846F	GAT TCG GCT GAT CTA TTA TCT C	54.4
	43036-43015R	GGA TGA CTC TAT TAA ACG GTC T	54.4
103	42916-42934F	AGC CTG ATT GTC TGG ACC A	54.9
	44083-44062R	GTA TTG CGG AGA TTA TTG TCT C	54.4
104	43984-44005F	CAT CTA CAT CAT CCG TGG ATA T	54.4
	45218-45197R	CCG ATT TCT ATC AAT TCC AAG G	54.4
105	45112-45132F	ACT CCA GAA CAT CTT CCA TAG	53.9
	46317-46294R	TGG TAG ATG AAG ATC ATA TTC ACA	53.6
106	46197-46217F	TTG GTA CGT TGA TTT CTA GCC	53.9
	47428-47408R	CTA GTG ACT CTC CAT CTT CTT	53.9
107	47320-47343F	CGA TTA TAA GAT TAA ATG GCA GAC	53.6
	48562-48541R	CCG AAG ATA TTG TAT CCG ATT C	54.4
108	48465-48485F	TTG TTG GAG AAC TTG ATA CGC	53.9
	49697-49673R	GAT AGT AAG TCC GTA TAT CCT TAA T	54.0
109	49582-49603F	GTT CCA TAT TAG CAG TCA TTC C	54.4
	50804-50783R	TAA TCC CTT CGT ATA CAC TCA G	54.4
110	50681-50701F	AAT AGA TGT ATC GCA CGC TCT	53.9
	51890-51869R	GAT TCC ACA GCC AAT GAA CAT	53.9
111	51774-51794F	TAG TAC GGG CGC TGT AAT TAA	53.9
	53001-52981R	GTG GAG ATA TTA CAG GAG AAG	53.9
112	52881-52905F	GTT GTA ATG TTA TCC AAC ATA TCA C	54.0
	54132-54108R	GAT ATC AAT CTC TTA TTC CTA GAC T	54.0
113	54023-54043F	GGT TAC ATT CAC TGC AGC ATT	53.9
	55266-55247R	GAT AAT AGT GGC CGG TGA AT	53.4
114	55154-55174F	ACA ACG TGG TAG ATA GAG AAC	53.9
	56339-56319R	CTC GTC TTC TTC TAC ATC AAC	53.9
115	56225-56245F	TTG GAC AAT CTG ACC ATC CAT	53.9
	57355-57335R	AAG TAA TTA CGA GCC GTT GCT	53.9
116	57208-57232F	CGA ATG AAC AAA GTG GAA TAT AAA C	54.0
	58446-58426R	TTA TCA GAA CGA GGT AAC TCC	53.9
117	58319-58338F	TTG CTA CGC TAT CAC TAT CG	53.4
	59497-59478R	ATG ATC CCG GTT CAA CTT CT	53.4
118	59394-59416F	GAT GGA GTA TAA TCT TTA TGC CG	54.9
	60640-60618R	ATA GTT CTG TTT CTC GAC ATA CC	54.9

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'→3')	T <sub>m</sub> (° C.)
119	60527-60547F 61770-61750R	CCG GTA CTG GTT TAG ATA TTC TAC ACG CAC TTC GCA TAT CAT	53.9 53.9
120	61634-61657F 62875-62851R	TAA TAT TGA TCC GGG CTA TTA CAT GAA GAA CTG TAG TGT ATT CAT ATT G	53.6 54.0
121	62759-62779F 63980-63959R	TAG AAG TCA AGG ATA ACT CCG GGA TGA TAT CTT CGA ACA ACA G	53.9 54.4
122	63869-63892F 65111-65088R	ACT ATG CAC ATT ATT CTA TCC AAG CTA ATG AAT TCT AGA CTC ACT CTA	53.6 53.6
123	65003-65026F 66221-66201R	ATA TAT CAC AAT TGG AAG CGT TGA ATG TCA GAG AAT GTC ATG TCG	53.6 53.9
124	66118-66138F 67375-67355R	GGA AGA TTA GTC AGA CCA TTC : AAG GCT TAT CCG TTT CAG GAT	53.9 53.9
125	67249-67272F 68474-68455R	ATC GAT ACA TAT ATG CAA TTC GCT TTA TGG AGT TCG ATC GCC TT	53.6 53.4
126	68333-68354F 69556-69538R	CTA CGT TCA GAT TCC AAT TCA C GAC AAC TGA GTG AAT GCC G	54.4 54.9
127	138802-138825F 140039-140019R	ATT ATT ACG TCT ACA GTC GTT CAA TTC TTC TAC TAA CTC CCG AAG	53.6 53.9
128	139916-139936F 141149-141126R	GTA ATA GGC TTA GGC AAA TGC AGT TGA TAG GTT AGA ACA TCA CAT	53.9 53.6
129	141032-141052F 142302-142322R	ATG TGG ATG GAC AGT AGG TAA GGA CTT TAT GAA AGC CTA TCC	53.9 53.9
130	142202-142222F 143438-143415R	CGC TAG CAT GGT CTT ATG ATA GGA TGT AAT TCT AGG TTA GAA TCA	53.9 53.6
131	143347-143367F 144769-144746R	TTA CAC GCA TCA GAC AAT GCT AAT CAT CAT GAT ATA TAC CTC CTC	53.9 53.6
132	144492-144515F 145817-145797R	TAG TAA AGC TGC AAT TAC ACA CTT TCC TCC CTA CTA ACA ACC TTA	53.6 53.9
133	145664-145684F 146930-146907R	ATC CTC CCG TTA AAA CCA TTC TAA CAC ATA GTA CAG ATT GAG TAC	53.9 53.6
134	146831-146851F 148074-148051R	CAA CTA AAC AGT ACG ACG GAT AAG GAT TGG ATG AAT AGT TAG GAT	53.9 53.6
135	147963-147989F 149211-149191R	CGT AAT GAA CAG ACT ATT TAT CAG GAG AAT GAA TCC ATT CCG TAC	53.6 53.9
136	149084-149107F 150345-150322R	GAG CAT TAG TAT TTC TGT GGA TTA GTG TAT AAT ACG TCG TCT AAT AAG	53.6 53.6
137	150192-150215F 151465-151445R	TCA ACG ATA TTC TAA CTC TTG ACA GTG TGG TGT ACT CGA TTA AGA	53.6 53.9
138	151358-151378F 152592-152572R	GTA ATG GTA ACT TCG AAA CCG TAC GTA GAA GCA ACA CTA GAC	53.9 53.9
139	152425-152445F 153660-153640R	TAC GGT ATC GCG ATT AGT GTA GAC ACG ATA CAT TTA CTG AGC	53.9 53.9
140	153505-153524F 154795-154772R	GCA CGT TAA CCG TAG ATG AA GCC AAT AAT TCC GTA ATC ATG AAT	53.4 53.6
141	154671-154691F 155921-155901R	TTA CCG TGT TGC TTA CAT TGC GTA TTA ACC GCG CAA CCA ATA	53.9 53.9
142	155792-155813F 157100-157081R	CAC ACT ACA CTG TCG AAT TTG CGT GCA ACC ATC CAA AGA TT	53.9 53.4
143	156973-156993F 158221-158201R	TCC ACA TCT ATA GAC GAC GAT CAA CTC AGT CTG ATA GTT CTC	53.9 53.9

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'→3')	T <sub>m</sub> (° C.)
144	158129-158152F	ATC ATG TGT AGA TCA AAC TTG GAT	53.6
	159376-159353R	GTA CAT TAT GTT CGT CTA CAA GAA	53.6
145	159264-159287F	AGT ACT CTC TCA TAA AGT GGA TTA	53.6
	160493-160473R	GAG TCT TGT CAT CGT CAT CTA	53.9
146	160385-160405F	TAT CTG GAT AAT GCG GTA TCC	53.9
	161696-161673R	TCA TAG ATA TGC AAT CGT ATA CAG	53.6
147	161562-161585F	AAT TCG GTA CTA TAG AAG AAC TCA	53.6
	162801-162778R	TGA ATA ATA CAC TAA CCA AGT AGC	53.6
148	162697-162717F	GAC TTG ATC CAT TTC CTC CAT	53.9
	163964-163941R	GAA TTT GTA CAT GTA TTG TAC GCT	53.6
149	163835-163858F	TAT CTT CAC GTA GAT ATA GGT GTA	53.6
	165082-165062R	ATC AGT GTC ATT TGT AGG CGA	53.9
150	164962-164982F	ATC TTA CGA CTC TCC ATA CGA	53.9
	166199-166179R	TAA TAG TGT CGA ATA GAC CGG	53.9
151	166091-166111F	AAG CTT CGT CGT AGA AAC ACT	53.9
	167414-167394R	CCA TGA TTT CGG TTG TAC ACA	53.9
152	167292-167312F	ATT ACG ACA AGT TTC GGC ACA	53.9
	168654-168634R	ATT CTC TAC CAG TCT GAG GTA	53.9
153	168505-168525F	ACT AAG AAC ACG TAT ACG GCA	53.9
	169812-169792R	TCC ACG TTG TTG ATA TCG TGT	53.9
154	169631-169650F	GAA GAC AGT TAC GGT TGT AC	53.4
	170994-170974R	TCA TAG TGG GTA CAG TAC ATG	53.9
155	170872-170892F	TAG TGC TCG ACA GTG TAT ACT	53.9
	172171-172151R	CCA TTA AGT GTA TCC ATC ACC	53.9
156	172069-172089F	ACA GGC TAT TTA CAA GAT GCG	53.9
	173320-173300R	ATG CGG ATA TGT CGT ATG TTC	53.9
157	173078-173101F	ACT TCA GTG ACA GTA GTC AAA TAA	53.6
	174421-174402R	CGT GAT ATA CCC TAG CCA TA	53.4
158	174323-174343F	CTA ATA GCA CGA TCG TGG TTA	53.9
	175665-175645R	GTC TTG AAA CTG TTG CTC CAA	53.9
159	175559-175582F	ATA CAA GAG TGG AAA CTC ACA TAT	53.6
	176896-176877R	CCA CTA GTA CAG AAG TTG CT	53.4
160	176800-176820F	AAT TCA GAT GTG AGT GTC GAC	53.9
	178144-178124R	CTG CGT TTA CGT TAC TAG CAA	53.9
161	178021-178041F	ATC GTG TCT GTC TCA GAA TCA	53.9
	179428-179405R	TAA GGT AGG TGA TTC AGT TCT ATA	53.6
162	179288-179308F	ATT ACA ATA GCA TGA TCC GCG	53.9
	180639-180616R	AGT ATA GGC GTT AAT CCA TGA TTA	53.6
163	180502-180525F	GTT AGA TAA TTG TGG TAA TAC ACC	53.6
	181757-181737R	CAG TAG ATG CGA GTA AGT CTT	53.9
164	181579-181599F	TGG TAA CTG TGT TAC ATG TGC	53.9
	182827-182807R	GAG GAA TGA GAG TGT CTT ATC	53.9
165	182676-182699F	ACC AAG GTA GTT AGT TAA TAC ACA	53.6
	183996-183973R	TAC ATA CAG GTA CGA AAT ACG TAA	53.6
166	183869-183889F	TAT GCA ATC AAT GGT CTC GGA	53.9
	185155-185135R	ACG CCT GAT ATG TAG ACA TTC	53.9
167	185027-185047F	CAG ATA CGC CTT AAT CCT AGA	53.9
	186289-186269R	TGT TGC ACA ATC GTT CCA TGA	53.9
168	186151-186171F	TAT GGA GCA AAC ATT AAC GCG	53.9
	187445-187425R	CTA TTG TGA GTC GTG TTA CAC	53.9

TABLE 1-continued

PCR product No.	Primer name	Sequence (5'→3')	T <sub>m</sub> (° C.)
169	187318-187338F	ATG CGA TAG CAA GAC TAA CAC	53.9
	188444-188464R	ATC TGA CTC GGA CTC TGT AAT	53.9
170	188303-188323F	AGT CTT CAG CAA TCA TCC TCA	53.9
	189118-189099R	GGA ATA TAG TGT CCG GTA CA	53.4

### 3-2: Characterization of Kvac103 by Comparison of Nucleotide Sequences

The novel attenuated virus strain Kvac103 was characterized by comparing the entire nucleotide sequence of Kvac103 with the entire nucleotide of VACV107 (Genbank: DQ121394). As a result, it was shown that the attenuated virus strain Kvac103 had a 19.5 kb [C9L-F3L] deletion region on the left and a 2.5 kb [A25L-A26L] deletion region on the right (FIGS. 7 and 8). Thus, the identity of the attenuated strain Kvac103 could be identified by amplifying the deletion regions in the genome by PCR and determining the nucleotide sequences of the PCR products. The 19.5 kb deletion region of Kvac103 was amplified using a primer pair of 15F (SEQ ID NO: 2) and 35R (SEQ ID NO: 3), and the 2.5 kb deletion region was amplified using a primer pair of 140F (SEQ ID NO: 4) and 143R (SEQ ID NO: 5). The amplification products were separated on agarose gel, and then sequenced, thereby identifying deleted sequence of Kvac103. In addition, the wild-type vaccinia virus DNA was identified by PCR amplification using a primer pair of 15F (SEQ ID NO: 2) and 16R (SEQ ID NO: 6).

TABLE 2

Region amplified	Primer name	Primer sequence (5'→3')	SEQ ID NO.
19.5 kb deletion region	15F	AGG AAC AGG ATC ATT GTC ATT ACA	2
	35R	TGA ACT AAA TGT TCC AGA TGA GGA	3
2.5 kb deletion region	140F	AGT TCT GCA TTC AAT TCG GTG AGT	4
	143R	AAT TGT ACC AAC GGT TCA AGA TGT	5

TABLE 2-continued

Region amplified	Primer name	Primer sequence (5'→3')	SEQ ID NO.
Wild-type vaccinia virus	15F	AGG AAC AGG ATC ATT GTC ATT ACA	2
	16R	TCG TTT ATC AAC ACT ACC GTT AGA	6

### 3-3: Optimization of Kvac103 Culture Conditions

The proliferation levels of the virus in Vero cells (ATCC CCL-81), in various culture media and at various serum concentrations, were analyzed to determine the optimum culture conditions. Specifically, Vero cells were seeded in a 12-well plate, and then cultured with 1% FBS (Gibco #16000)-containing DMEM (Gendepot #CM0027050), Advanced-DMEM (Gibco #12491), OptiMEM1 (Gibco #31985), VP-SFM (Gibco #11681) or OptiPro-SFM (Gibco #2309) medium for 24 hours. Then, the cells were infected with Kvac103 at a titer of 100 PFU/well for 2 hours. Thereafter, the medium in each well was replaced with the same medium containing 0%, 1%, 2% or 5% FBS, followed by culture for 3 days. The medium was removed, and the virus plaques were observed by staining with crystal violet solution. As a result, it was shown that the plaques were the clearest and largest in the OptiMEM1 medium containing 1% FBS. Under such culture conditions, the proliferation of the virus was smooth, indicating that these conditions are suitable for the replication of Kvac103 and the production of a recombinant virus.

As described above, the attenuated vaccinia virus strain Kvac103 according to the present invention has reduced toxicity, shows reduced skin lesions, and effectively induces humoral and cell-mediated immune responses. Thus, it can be expected that the attenuated vaccinia virus strain Kvac103 can be effectively used as a vaccine composition which has excellent immunogenic effect together with reduced toxicity.

Accession Number

Depository authority: Korean Culture Center of Microorganisms;

Accession number: KCCM11574P;

Deposit date: Oct. 1, 2014.

#### SEQUENCE LISTING

<160> NUMBER OF SEQ ID NOS: 7

<210> SEQ ID NO 1

<211> LENGTH: 167122

<212> TYPE: DNA

<213> ORGANISM: Vaccinia virus

-continued

&lt;400&gt; SEQUENCE: 1

---

```

accctactca tccaatttca gatgaataga gttatcgatt cagacacacg ctttgagttt    60
tgttgaatcg atgagtgaag tatcatcggt tgcaccttca gatgccgacg cgtcgacata    120
cttgaatcca tccttgacct caagttcaga tgattccttg cacatgtctc cgatacgaac    180
gctaaactct agattcttga cacattttgt attgacgacg gttgaaccga tgatatcttc    240
gtaactcact ttcttatgag agatgttaga cccgagtagt ggatgggtct tgatgtcgct    300
gtctttctct tcttcgctac atctgatgtc gatagacacc tcacagtctt tgatcatagc    360
aagagcttct tcacgagtga tcgcgggaga gtccttacct tgtcctgggg acacgctgga    420
caatctagca ttcactgtgt ttccatcagc ggattctgag atggatttaa tctgaggaca    480
tttggtgaat ccaaagtcca ttctcagacc tccaccgatg atggagtaat aagtggtagg    540
aggatctaca tcctcgactg atgtggaatc atcttctgat tccacctcgg gatctggatc    600
tgactcggac tctgtaattt ccgttacgga ttggcaaact ttatcattgg tcggtgtttg    660
gtcttgcctt gtgactttga taataacatc gattcccata tgatgtttgt tttctcttc    720
cgtacacgag gaggaggatg aggatgattg ctgaaaactg gcaggcatag cagctgccgc    780
caggcacatg catgccagga cgatatattg tttcataatt gctattgatt gagtactgtt    840
ctttatgatt ctacttcctt accgtgcaat aaattagaat atattttcta cttttacgag    900
aaattaatta ttgtatttat tatttatggg tgaaaaactt actataaaaa gtgggtgggt    960
ttggaattag tgatcagttt atgtatatcg caactaccgg gcatatggct atcgacatcg   1020
agaacattac ccacatgata agagattgta tcagtttctg agtcttgagt attggtatta   1080
ctatatagta tatagatgtc gccactaga gttacagtct ccgaatgcgg catgatagta   1140
tcattctttg ctttcgtaa ctgtttggag gaagaatctt tgttattgca tttaatctcg   1200
aaattcagag tgcacacctt tctcctgtaa agaaaactga agtcgctacc ttattaagaa   1260
cggagaagta tccatcacga aagacgggat tacagtcttt atgattcata gtaatagtta   1320
gttccgacgt tgagatggat tcgctgagac cggtagtggt cgtcogagta cacgatgtgt   1380
cgttaacggg atacagatta atttccacat cgatatagtt aaaggttatt actgggtacg   1440
ggttcgcatt tatctgcgga agagacggtg tgagaatatg tcccgagacc acacggagaa   1500
cagatgacgt ctccggatac tccgtatcct attccacatt ttgtttggga aacacatgcc   1560
ttgcatccgg atgacctttt gagaagacaa taatatccgg gagagcattc acagattcta   1620
ttgtgagtcg tgttacacga tcgctcttc cgttacaact tagacaagcg ggtaaatgat   1680
tattgcgaga tgtgaaggta cccgaaccac acggcgtaca ttgtgtgtta gtcttgctat   1740
cgcataatct ggaagcgtat gttcccagac acaaattatg gcgtttgtat tcgttgcttt   1800
tacactttcc atcggatggg gcatgcggtg ctatatctct tccgtttatt attatacatg   1860
agagaaacaa tatacagag tataatacgg acttcatgat ttaataatgt agtaatcgtc   1920
gtcttgttcc tgtttcttac ttctccaatc atatagatat tttctttcta tcatggataa   1980
tatttgtaat ggttctttcc gtacaacata ctgttttagat gatattgcgc ataatttccg   2040
gaggcaaata cgatagtcta gattgaccga tggtagactc taatttattg agtgctttgt   2100
cgacgagttt acttttacgc tccatcgata gatggcactg ttctatgaga tcgtcgtaca   2160
tgggaaatga aatgtgactg tctgaatgta tggctttaag atagctgtga tacogtatac   2220
aggtcggtgt cggagattcg gaatcgtctt taaggcgact tatgtcacga tgatggaatc   2280

```

-continued

---

tatcttatcg	aatgatatat	ttttcataaa	tacactttta	tagtcctcgt	ttaaacagaa	2340
tttactatgt	agttccgoga	atgactcgtc	ccttaatagg	cagtaggcta	gtatcttttt	2400
tacgtagtaa	tcgctgtagg	gagagacatc	ttgtagaaca	acgatttaat	cataggtaga	2460
gatactttca	gtctgtggg	gatgatgtca	ttcacaacat	ccgccttgta	tatgatgttt	2520
ctgttttcaa	acaccaagtc	gaataccgtc	tttagtcgga	aggttgatgt	cgtatccgat	2580
gtatgaggca	acattgttgt	tacaattttg	aaaggcggta	ttatagtatt	cgtctttctg	2640
aatgtcgaac	ctatctaata	gataccgtag	tatattgaga	gtgtatcctt	gattatgttt	2700
tatgaataga	taaagtagat	gttgtccttc	ttccttttgt	tcgtgccaat	tgagtaacat	2760
tatgagaata	tgacctgttg	cacaatcgtt	ccatgatggg	tgtacaatca	agattattac	2820
gtatcctcga	gataaaagag	catacaccac	acgaggacta	tgtttggtat	actggtgaag	2880
gtaagtgtgt	aaccgcggtta	atgtttgctc	cataatctat	tatcgcgtag	atgaatcgct	2940
tctcggctcg	catcttagtg	tgacttaact	tgtaataatt	gctttcgtag	aacgtggata	3000
tgtgtttaca	gtagtaatga	agagaagtga	gttcatcctc	gtcggcgcaa	ttagggtcgg	3060
atcctttgta	cagaacgtaa	tagtttaagc	tccattgaa	tttatatcta	agataacaca	3120
gcaatagatc	ggatgattta	ctaaagtc	caatgggtgc	cgtagtata	tcaaagatct	3180
tgttatcgat	tgatagtgg	catccttgct	atcaaagtta	cgcatgccgt	ggtgtaacaa	3240
tatctttaat	acagatggat	taaatcgtgt	atctcatcga	tagcaatgta	atggagagtt	3300
acctcgttta	ttcagatcgc	agtgtttaat	aactagctta	aacagatgag	acgatgtatc	3360
tacatcaaag	aacgtaaaat	acatatgaca	gacattgttg	acagaaacgt	gaccttcatt	3420
cttaccgtcg	tccataaata	cgttaggtat	gtaccacata	ctgtcgcgaa	cgatcgtac	3480
aatctcgtcc	atctcataat	gatttacttt	ttcataatta	aagatgtgaa	agaaaaacag	3540
aacaatatat	ttttttagta	atgtttatgc	gagacatata	aaataaacctc	cgtgtttatg	3600
atgccggtaa	atgtttttat	catcttggtc	ggaatcgatt	ttgtaatatg	tcatggaac	3660
aaatgaaaca	ggacattatc	gctccatgat	aaattattta	atggagtaat	aaagtatctc	3720
catgggtaat	ttcgaatca	agttatcgtc	tgtattaatg	ttgtccacta	tggagtcgat	3780
cctctcattg	ttctttacag	tttctgtaat	gatggacggt	agttcttttt	tgtaccattt	3840
gatgtcggat	tctttgcgta	tctcaatctg	tggcgtctgt	ttcgtttaaa	gaatatatca	3900
aacatggaga	cgctgatgat	gtagacattc	ttcattctat	taatgtctac	tctatagcgc	3960
tttagttcct	tatgacgacc	ggagatatca	tacttacttt	agaaggaaaa	tcatcatcta	4020
ggattaaggc	gtatctgata	caggcgaata	atggttcagg	atatagatag	cgatatatctc	4080
tattaaatgc	gtcaatcata	gtctctagag	tgggatggta	actcagtaat	aaatcaacta	4140
tcctcgtttt	gtttttctct	tggtaactgc	ttttctggat	ggccgtattg	attatcgagc	4200
gtgatgttgt	aacactcgtc	ccatattcca	ataaccgctt	tgcaaatgtg	atattattga	4260
catcgaccgc	gtaatatagt	agagttatcg	atcatatcta	tattatccat	gtacttgctt	4320
agtatatcaa	atacatctat	cagtatgggt	tcataacagt	gatacccgca	attattaaat	4380
ctcgataata	tcagaccgta	catacataga	cggccattgt	tcgatacgtg	atttacagcc	4440
gcgtgtccat	attttccacg	ataaacctta	cgacgtttac	atcgacgaga	ttattattaa	4500
caaagtagtc	gtgcagagga	tagttgttgt	cggttatcca	acatgcattg	aatgataggt	4560
atacttacca	tatcgcgcta	atgtaagtag	tttatcaaca	tggcttgtag	gatggattca	4620
tcctgttgtc	taaactctct	tagaatgtta	tcgatgatgt	agtggttata	ttctctgga	4680

-continued

---

tcgtagcaag	taatactacg	cattacgtcg	acaagagtat	gacgtctctc	aataaggaag	4740
attaacgatt	tccatgtcta	cattatatgg	ggttactcta	aatcgcttgt	ttagataata	4800
cgccctcaat	atagggctga	cgctgtatac	tctacacgtg	tccacatcct	ttattaataa	4860
tttaacaatc	tctatatcta	tggttgagaa	agaccagtag	tattggatgg	gtaaagatcc	4920
tccttcgtct	ctgccatgaa	tggaaacatt	gttattgatac	aaacatttaa	ttacatcctt	4980
ggatagagat	tgagattctc	tatgagacga	tatatagtaa	tgaagagagt	tcttacacat	5040
atcaactgtc	tacatacagg	tacaaaatac	gaaaccggtg	ctgtaacatt	ctgatttaag	5100
aagccatagc	aatacttctg	gtctcggatt	aggcgtcgtt	acgtatatat	ccaccaatcc	5160
gagaccattg	attgcataat	tcgtattctt	ggacggacgt	atccgtttat	ccacaattag	5220
gtatttttag	agacgtaagt	cgatattata	cgaatacaga	tcgaaatcat	ttatattcga	5280
cttgagttcg	ttagaggaat	tcgaatagct	ggatatcagt	agatgcacaa	tctgagattt	5340
gacgtatcta	tgcttactgt	atgctcctag	cggagttaat	ccttcgttgt	ttctacaaa	5400
tctctcgact	ccgcgagaga	gtaacagccg	aacaatctta	atgtctgtat	cgcatattt	5460
ggagacgtaa	caatgtagcg	cattgtttcc	tcgtctatct	atatgttttg	ataagttgtg	5520
acacgtttca	atctctgggt	ttatTTTTT	gtacgtcaca	tcttcatcca	gtagacgaca	5580
tagaatagtg	cactctctac	cacaataatc	catagctatt	ctggtgctaa	ttattcctat	5640
ttcacgaagg	caatcattcc	tcataagatg	ataaaaagtg	tagtgagaga	gcatgaagga	5700
gatttagtat	ttagcagtg	ggatatgatac	caagagggtg	agatagtcgt	tctcgttcag	5760
aatctttcgc	agcataagta	gtatgtcgat	atacttatcg	ttgaagactc	ttccagagac	5820
gatagctgat	tgagtacaaa	gtccaatgat	tgacagaa	tcttcggcgg	tttcatgga	5880
gtcatttctg	atgaacatt	taatgatctc	cacgcaattg	tcccacggaa	gtgaatcctt	5940
caactcacca	ccaagagct	ccgttgcatc	agttctgaaa	gagatgagaa	gcctgtagag	6000
agaccctcgc	ctttctctat	gggtccatct	atgagaaacc	cacaggatgt	attcagtcag	6060
acaatgtctg	acgtcggcca	cgttattcag	ggagtcctta	gtagcgtggc	aatgacaggg	6120
tctgaactgg	gcacaaggaa	aggccattgt	gaaggtagac	gaaggttaac	ctgatggtag	6180
acctgtagcc	gtctatgcta	atagagggtc	ttaatttcca	ttttttta	ggggttggtg	6240
atgaggaatg	agagtgatat	catattgaga	tacgtagtta	tgtagagggtg	tatttctctat	6300
attatttact	ttcggtttca	tattttacca	actctttaat	aaatttcttt	tcacgatgca	6360
tcttattaaa	tgacgttttc	tcataagtgg	acatatagat	gcaaaagtaa	tgaagaaaag	6420
tattacctct	atcatctaca	taattagggt	ctgctccttt	ttttaacaac	ttatacagta	6480
cgtagtagta	gtttatcggg	tttaaatcaa	gtctagaata	tatagtggtat	taatataatt	6540
ttatattagc	taaagctatc	tatactatca	gaaagcatat	cattctcaac	ttcatcatga	6600
gttaaatatt	tgtgtaatgg	aatgtgacca	tcactgtcat	gacatactcc	tttaaatagg	6660
tttttaaaac	agatgattca	aatccttcat	tcattagata	acagtgtaac	ggagtcgtac	6720
cttctactag	tttgtttata	tcacagcatt	ctacaaacag	tctaacaat	agagaagacg	6780
gacagacttt	aacgtataaa	tgacacatgt	tatcgatatt	cgttgatgaa	ttattattaa	6840
acgtagttat	gataaatgat	tctaacgaca	tctctcgtca	gagataaaat	ctagatcgt	6900
atcatactcg	catagcatag	tttttcataa	ttaatacaat	atttaaaaga	cttattcgga	6960
aagtatttta	atacatgtat	catcgatgga	gatccatag	aggagtcact	tgtagttctt	7020

-continued

---

cagtagtaat aacagtgcta tcatcgatag tataattata tgttggtgta attggagtaa	7080
ctggtgtag ttcttccgtg gaatcaataa ttatactaac agcaatagta taattatata	7140
aatatggtcc gttgatatca catattttaa tgaactcatt tctaaccacc tcagctatat	7200
ctgtccaatt aaatgtagcc aacaactctac tacgttctct ttgattgact acttgtacgg	7260
tagcgacgct acactatctt tattgtcttc tacatgctcc aattgaatgt catgatataa	7320
cgcagttttt cttatgcatg ttccataaca ccacgaacat gtcgcagtaa gataatttct	7380
gtaaattcat gattgccggg cataaacaag cccgtcaata attgtggcta tatattcagt	7440
ttatagagca aaataattaa gcacaatagc gcttaatctc aaaatatgtt atgtttattt	7500
ttttcatatt aaacatactg gttaaaatcc tctaaaggct gatcttcttc tataaatcaa	7560
gatcataatt acatttagac agtggtttca tgtttataaa aatgttcttt ttgtgtgaat	7620
aaggaatata ctaatcaata atcaaccatc gacccatta cgatagtagt caggcaacc	7680
cccattagag aggtacgtgt aatcagcttc tccagtttta gtatttttat aagtcattgt	7740
tacataaacg gcttttaaac agtctcctcg ataataagcc atatctggaa atttattaaa	7800
tactcgagtc attttacgca cggtaaaaa agtaagtaat gtcgacgact tcttacattc	7860
tatagaaaca cctagaatac tcattttctt ttggaaaata tctcagact ctgatttgaa	7920
caatgcacga cctatagtaa accgtgacca ataagttata ttagtcaatg gtatatccaa	7980
accatcaggt gtggatagta cgcgatagc ccagtctttg gtatcgatag tgtagttatt	8040
gaactgagaa gttaccgtat agtctttttg gtcactctca aacaaggaaa ctaaacctc	8100
tacactattg aacgatttat cttccgtaat gggggaata acggaatat aaagtggact	8160
agcgatggat gaagtccgca atataagaca cgctattaat ccgtatatca tcattttgat	8220
attacttata ataacgattt gtttaatttt tagtttatac tattaattgt aaatgatatt	8280
attatttttt taagtattat cagctttagt ttatactatt actatttgta atatttagac	8340
atagataaac gtgataaaag tctatttgtt tatatttatt gcgatagca gtatttccct	8400
ataaaaagta tacgtcctgt gttgtcttta atcatgtaca tgaatggatg gtttatgtag	8460
accttcgtac gatataccat cgaaaagtta gtcataaata ctctgtaac ggccgatgct	8520
tctgtatact cctcattaac atctataaac gtcgtatgta gaaattttc tacagtgata	8580
gtttcattac acatcttctc aaaatctgca taatatccga atatattagt aagtcctaaa	8640
ttttctaaaa tcggtaccag attatacggc tctgtcattt ccactttaaa ctttggcata	8700
tacaagtcta tacttttagt agataacata ccacaccatt ttttaaatTT tcatctgtt	8760
atattttttt ctatgttata tataccttct atgtcgtccg gtagtataat taccatacta	8820
gagttccctc cgtatggaat atcgataata gagaatcctc cgaataattc attaatatgt	8880
acatattgca agttattctc ggtaccacc atcatatcaa cgctggtaac tatattctta	8940
gaaatataaa acttgtctgt atatgtaaga tgtttagaaa atggatattt ccacattgct	9000
ttaaaatgga cggcgctaac aactgtcata cgagtattaa tggatagcgg actagtcaat	9060
aaggaattaa ttttaccatt tgcattgtc ttaaccatt cgttgattag ttcctttgtt	9120
tggttagcat tattaaagtt tacagtttga aaatcgtctt ttattttttg taggaaggag	9180
gcatggaact cgatactatc gctaccgtat attttatttg cggtagctag tgtcgcacaa	9240
tacggaatat ctacgtccat gtcattattg tcatcgggtg tattctcatt catattctct	9300
atatattttg atagttgttc agctgtagaa ccagctgctc catgatttag aatagataaa	9360
gtagataaaa tagaaactgg agaaatcaaa acattttcat ccgtgtgttt tacgattagt	9420

-continued

---

tctttaaaga	tatccatggt	atagaccaaa	caataacgat	aacgatatat	atcataaata	9480		
aataatgta	aatttcagtt	tatgtttga	ccccgtatc	atacttaaca	aattggtatt	9540		
gcgtacacaa	tcaatcatat	tacataccat	taataatgca	agcataaaaa	atcgtagta	9600		
gatgtttcta	aatataggtt	ccgtaagcaa	agaatataag	aatgaagcgg	taatgataaa	9660		
atcaatcggt	atctaaaatg	atcatactca	tttattttat	tctattatat	taacacatac	9720		
atttttaaca	gcaacacatt	caatattgta	ttggtatttt	tatattat	acacaattaa	9780		
caatatatta	ttagtttata	ttactgaatt	aataatataa	aattoccaat	ctgtcataa	9840		
acacacactg	agaaacagca	taaacacaaa	atccatcaaa	aatgttgata	aattatctga	9900		
tggtgtgtt	cgctgctatg	ataatcagat	cattcgccga	tagtggaac	gctatcgaaa	9960		
cgacattgcc	agaaattaca	aacgtacaaa	cagatattcc	agctatcaga	ttatgcggtc	10020		
cagagggaga	tggatattgt	ttacacggtg	actgtatcca	cgctagagat	attgacggta	10080		
tgtattgtag	atgctctcat	ggttatacag	gcattagatg	tcagcatgta	gtattagtag	10140		
actatcaacg	ttcagaaaac	ccaacacta	caacgtcata	tatcccatct	cccggtattg	10200		
tgcttgatt	agtaggcatt	attattatta	cgtgtgtct	attatctgtt	tataggttca	10260		
ctcgaagaac	taataaacta	cctttacaag	atatggttgt	gccataat	ttataaat	10320		
ttttatgagt	atttttacaa	aaatgataa	agtgtatgtc	ttatgtatat	ttataaaaat	10380		
gctaaatag	cgatgatct	atgttatttg	tatttacta	aacaatacct	ctacctctag	10440		
atattataca	aaaat	at	ttcggcat	at	taagtaa	aatctagtta	ccttgaaaat	10500
gaatacagtg	gggtggtccg	tatcaccagt	aagaacataa	tagtcaaata	cagtatccga	10560		
ttgagat	gcatacaata	ctagtctaga	aagaaattg	taatcatt	ctgtgacggg	10620		
agtccatata	tctgtatcat	cgtctagtt	atcagtgcc	catgctatat	tctgttatc	10680		
atcattagtt	aatgaaaata	actctcgtgc	ttcagaaaag	tcaaatattg	tatccataca	10740		
tacatctcca	aaactatcgc	ttatacgttt	atctttaacg	atacctatac	ctagatggtt	10800		
at	tactaac	agacatt	tc	agatctatt	gactataact	cctatagttt	ccacatcaac	10860
caagtaatga	tcactatttg	ttatataaca	ataacataac	tctttccat	ttttatcagt	10920		
atgtatatct	atatcaacgt	cgtcgttga	gtgaatagta	gtcattgatc	tattatatga	10980		
aacggatag	tctagaacgg	caattgtttt	acgtccagtt	aacactttct	ttgat	ttaaa	11040	
gtctagagtc	tttgcaaca	taatatcctt	atccgacttt	atatttcctg	taggggtgta	11100		
taattttatt	ttgctccac	at	atcgggtg	ttccaaatat	attactagac	aatattccat	11160	
atagttatta	gttaagggta	cccaattaga	acacgtacgc	ttattatcat	catttggatc	11220		
gtatttcata	aaagtatttg	tactatcgat	gtcaacacat	tctacatt	ttaatcgtct	11280		
atatagtatt	ttctgatat	ttctataat	atcagaattg	tcttccatcg	gaagttgat	11340		
actatcggaa	tcagttacat	gtttaaataa	ttctctgatg	tcattcetta	tacaatcaaa	11400		
ttcattatta	aacagtttaa	tagtctgtag	acctttatcg	tcgtaaatat	ccattgtctt	11460		
attagttacg	cttattttta	tgtgttttac	gttgc	ttat	ttat	aagaatgatt	11520	
gtttgacgaa	tcacgagaac	tattaagaca	cattattagg	tatatattat	aaaaaagttt	11580		
ttgattacga	tgttataaga	ggaaaagagg	acacattaac	atcatacatc	aattaactac	11640		
attcttataa	catcgtaac	aaaagaattg	caattttgat	gtataacaac	tgccaatggg	11700		
ttatggaatt	gtatattaca	tattatacgg	tatgttgta	acgacaaata	ccggtcggtta	11760		

-continued

---

attgtctgcc ggtgtaatag aattatata atctatctat tacaccggcc ttgtatacat 11820  
 aataataagt tgtggtagta tgatctocat atttataatt taggactttg tattcagtat 11880  
 ttttggatc ataaaaata aaaaaagtt ttactaattt aaaatttaa aagtatttac 11940  
 attttttca ctgtttagtc gcggatagtg aattcgatcc tgccaaaac aatacatcat 12000  
 ctatagatca tgtaacaata ttacaataca tagatgaacc aatgatata agactaacag 12060  
 tatgcattat cggaaatatt aataacatta catattatat caatatcaca aaaaaaata 12120  
 cacatttggc taatcaattt cgggcttga aaaaacgat cgccggaagg gactatatga 12180  
 ctaacttadc tagagatata ggaatacaac aatcaaaact tactgaaact atacgtaact 12240  
 gtcaaaaaa tagaacata tatggtctat atatacacta caatttagtt attaattgtg 12300  
 ttattgattg gataaccgat gtgattgtc aatcaatatt aagagggttg gtaaattggt 12360  
 acatagctaa taatacctat actcacaata cacccaataa tacaacaacc atttctgagt 12420  
 tggatatcat caaaaactg gataaatacg aggacgtgta tagagtaagt aaagaaaaag 12480  
 aatgtggaat ttgctatgaa gttgtttact caaaaacgata gatactttgg tttattggat 12540  
 tcgtgtaac atatattttg cataacatgt atcaatatat ggcatagaac acgaagagaa 12600  
 accggtgcgt cggataattg tctatatgt cgtaccggt ttagaaacat aacaatgagc 12660  
 aagttctata agctagttaa ctaataaata aaaagtttaa tttgttgacg acgtatgtcg 12720  
 ttatttttcc tcgtataaaa gattaatttg attctaatat aatcttagt attggataaa 12780  
 tatcaattca aattaattcc attagattat atcataaata aaaatagtag cacacaacta 12840  
 cttcagccaa atattctttt ttgaaacgcc atctatcgta gtgaggacac aagtgaacct 12900  
 ataattatca aatttattag tatcagtcac atgaaggact ttctgtagag tgacgattcc 12960  
 actatctgtg gtacgaaocg tttcatcttc tttgatgcca tcaaccagat gttctataaa 13020  
 cttggtatcc tcgtccgatt tcatatcctt tgctaaccaa tacatatagc taaactcagg 13080  
 catatgttcc acacatctg aacaatgaaa ttctccagaa gatgttacia tgtctagatt 13140  
 tggacatttg gtttcacocg gttaacatat gagtgaacac acccatacat gaaagcgatg 13200  
 agaaatagga ttctcatctt gccaaaatat cactagaaaa aatttattta tcaattttaa 13260  
 aggtataaaa aatacttatt gttgctcgaa tattttgtat ttgatggat acggaagatt 13320  
 agaaatgtag gtattatcat caactgatc tatggtttta tgtattctat catgtttcac 13380  
 tattgcgttg gaaataatat catatgctc cacatatatt ttattttgtt ttaactcata 13440  
 atactcacgt aattctggat tattggcata tctatgaata attttagctc catgatcagt 13500  
 aatatattaat gagaacatag tattaccacc taccattatt ttttcatct cattcaatc 13560  
 ttaattgcaa agatctatat aatcattata gcgttgactt atggactctg gaatcttaga 13620  
 cgatgtacag tcatctataa tcatggcata tttaatacat tgttttatag catagtcgtt 13680  
 atctacgatg ttagatattt ctctcaatga atcaatcaca taatctaag taggtttatg 13740  
 acataatagc attttcagca gttcaatggt tttagattcg ttgatggcaa tggctataca 13800  
 tgtatatccg ttatttgatc taatgttgac atctgaaccg gattctagca gtaaagatac 13860  
 tagagattgt ttattatadc taacagcctt gtgaagaagt gttctctctc gtttgcatt 13920  
 catgttaatg tctttaagat aaggtaggca aatgtttata gtactaagaa ttgggcaagc 13980  
 ataagacatg tcacaaagac ccttttttgt atgtataagt gtagaaatta taacatccat 14040  
 agttggattt acataggtgt ccaatcggga tctctccatc atcgagataa ttgatggcat 14100  
 ctcccttctt ttttttagtag atatttcatc gtgtaagaat caatattaat atttctaaag 14160

-continued

---

tatccgtgta	tagcctcttt	atttaccaca	gtcccatatt	ccactagagg	gatatcgccg	14220
aatgtcatat	actcaattag	tatatgttgg	gaggacatcc	gagttcattg	ttttcaatat	14280
caaaaagatg	gtttccttat	catttctcca	tagtggtaga	atactacaca	ttattccgtg	14340
cggttttcca	ttttccaaaa	acaatttgac	caaatctaaa	tctacatctt	tattgtatct	14400
ataatcacta	tttagataat	cagccataat	tcctcgagtg	caacatgtta	gatcgtctat	14460
atatgaataa	gccgtgttat	ctattccttt	cattaacaat	ttaacaatgt	ctatatctat	14520
ataagatgac	ttaatataat	attgaagagc	tgtacaatag	tttttatcta	taaaagacgg	14580
cttgattcog	tgattaatta	gacatttaac	aacttccgga	cgcacatatg	ctctcgtatc	14640
cgactttgaa	tacagatgag	agatggatat	acagatgcaa	tacggtagcc	caatttcgta	14700
gttgataatc	atcatacgcg	tatcagtact	cgctctcata	aagaacactg	cagccatttt	14760
ctatgaacaa	atcaataatt	ttaggaacag	gatcattgtc	attacataat	tttctataac	14820
tgaacgatgg	ttttcacatt	taacactcaa	gtcaaatcca	tgttctacca	acacctttat	14880
caagtcaacg	tctacatttt	tggatttcat	atagctgaat	atattaaagt	catttatggt	14940
gctaaatcca	gtggcttcta	gtagagccat	cgctatatcc	tttaacttta	acatgtctac	15000
tatttggtga	ttcttcta	ggggatttgg	tagacctcct	actacgtata	atttattggt	15060
agcgggtatc	ccgctagcat	acagctcggg	gctattcctc	ggaggaattg	gaatccaatt	15120
gtttgatata	taattttaccg	ctatagcatt	gttatgtatt	tcattgttca	tccatccacc	15180
gatgagatat	actactctc	caacatgagt	actgttacac	atatggaata	tatctataat	15240
ttgatccatg	ttcataggat	actctatgaa	tggatacttg	tatgatttgc	gtgggtgttt	15300
atcacaatga	aatattttgg	tacagtctag	tatccatttt	acattattta	tacctctggg	15360
agaaagataa	tttgacctga	ttacattttt	gataaggagt	agcagatttc	ctaatttatt	15420
tcttcgcctc	atataccact	taatgacaaa	atcaactaca	taatcctcat	ctggaacatt	15480
tagttcatcg	ctttctagaa	taagtttcat	agatagataa	tcaaaattgt	ctatgatgtc	15540
atcttccagt	tccaaaaagt	gtttggcaat	aaagttttta	gtatgacata	agagattgga	15600
tagtccgtat	tctataccca	tcatgtaaca	ctcgacacaa	tattcctttc	taaaatctcg	15660
taagataaag	tttatacaag	tgtagatgat	aaattctaca	gaggttaata	tagaagcacg	15720
taataaattg	acgacgttat	gactatctat	atataccttt	ccagtatacg	agtaaataac	15780
tatagaagtt	aaactgtgaa	tgtcaaggtc	tagacaaaacc	ctcgtaactg	gatctttatt	15840
tttcgtgtat	ttttgacgta	aatgtgtgcg	aaagtaagga	gataactttt	tcaatatcgt	15900
agaattgact	attatattgc	cacctatagc	atcaataatt	gttttgaatt	tcttagtcat	15960
agacaatgct	aatatattct	tacagtacac	agtattgaca	aaatcggcat	ttatgtttct	16020
ttaaaagtca	acatctagag	aaaaatgatt	atctttttga	gacataactc	ccattttttg	16080
gtattcacc	acacgttttt	cgaaaaaatt	agtttttctc	tccaatgata	tattttccat	16140
gaaatcaaac	ggattggtaa	cattataaat	ttttttaaat	cccaattcag	aaatcaatct	16200
atccggaag	aattctatat	atgttttcat	catttcacaa	ttcattccta	taagtttaac	16260
tggaaagacc	gcagtaagaa	attctgttgc	aatggatacc	gcatctgtta	taatagatct	16320
aacggtttct	tactcgggtg	gatgcaataa	atgtttaaac	atcaaacatg	cgaatcgcga	16380
gtgcagaccc	tcgtctctac	taattagttc	gttggaaac	gtgagtcggg	gcattaggcc	16440
acgcttttta	agccaaaata	tggaagcgaa	tgatcgggaa	aagaagattc	cttctactgc	16500

-continued

---

```

agcaaaggca ataagtctct ctccataacc ggcgctgtca tgtatccact tttgagccca 16560
atcggccttc ttttttacac aaggcattgt ttctatggca ttaaagagat agtttttttc 16620
attactatct ttaacataag tatcgatcaa aagactatac atttccgaat gaatgttttc 16680
aatggccatc tgaaatcogt agaaacatct agcctcggta atctgtactt ctgtacaaaa 16740
tcgttccgcc aaattttcat tcactattcc gtcactggct gcaaaaaacg ccaatacatg 16800
ttttataaaa tatttttctg ctgggtgttag tttattccaa tcattgatat ctttagatat 16860
atctacttct tccactgtcc aaaatgatgc ctctgccttt ttatacatgt tccagatgtc 16920
atgatattgg attgggaaaa taacaaatct atttggattt ggtgcaagga tgggttccat 16980
aactaaatta acaataacaa taaatttttt ttcagttatc tatatgcctg tacttgggatc 17040
ttttgtacat cgatatcgcc gcaatcacta caataattac aagtattatt gatagcattg 17100
ttattagtac tatcataatt aaattatcta cattcatggg tgctgaataa tcgttattat 17160
catcattatc attttgaat tgtgacatca tactagataa atcgtttgcg agattgttgt 17220
gggaagcggg catggaggat gcattatcat tattatttaa cgccttccat ttggattcac 17280
aatgttacg cacattcaac attttatgga aactataatt ttgtgaaaac agataacaag 17340
aaaactcgtc atcgttcaaa tttttaacga tagtaaaccg attaaacgtc gagctaattt 17400
ctaacgctag cgactctggt ggatatgggt ttccagatat atatcttttc agttccocta 17460
cgtatctata atcatctgta ggaatggaa gatatttcca tttatctact gttcctaata 17520
tcatatgtgg tggtgtagta gaaccattaa gcgcgaaaga tgttatttcg catcgtattt 17580
taacttcgca ataatttctg gttagataac gcactctacc agtcaagtca atgatattag 17640
cctttacaga tatattcata gtagtctgaa cgatgactcc atctttttaga tgcgatactc 17700
ctttgtatgt accagaatct tcgtaccgca aactcgatat atttaaaaa gttaatgaga 17760
tattaacgog ttttatgaat gatgatatat aaccagaagt tttatcctcg gtggctagcg 17820
ctataacott atcattataa taccaactag tgtgattaat atgtgacacg ttagtgtggg 17880
tacaaatag tacattatcg tctacgtcgt attcgatata tccgcataca gccaaacaaat 17940
ataaaatgac aaatactcta acgacgttcg taccatctt gatgoggttt aataaatggt 18000
tggatttcaa tttattgtaa aaaagattc ggtttttatac tggtcogatat tctcattgct 18060
tatattttca tctatcatct ccacacagtc aaatcogtgg ttagcatgca cctcatcaac 18120
cggtaaaaga ctatcggact cttctatcat tataactcta gaatatttaa tttggtcatt 18180
attaatcaag tcaattatct tatttttaac aaacgtgagt attttactca tttttataa 18240
aaacttttag aaataacag actctatcgt gtgtctatat cttcttttta tatccaatgt 18300
atztatgtct gatttttctt catttatcat atataatggt ccaaattcta cacgtgcttc 18360
ggattcatcc agatcattaa ggttcttata attgtaacat ccttctcttc cctctcttac 18420
atcttctctc ttattcttat tcttagcgtc acagaatcta ccacagcagg atcccatgac 18480
gagcgtcata ttaactaat tcattttcaa ttataatata tgattagtaa tgaccattaa 18540
aataaaaaat attcttcata accggcaaga aagtgaaaag ttcacattga aactatgtca 18600
gtagtataca tcatgaaatg atgatatata tatactctat tttgggtggag gattatatga 18660
tataattcgt ggataatcat ttttaagaca catttctca ttcgtaaaac ttttcacgtt 18720
aaatgagtgt ccataatttg caatttcttc atatgatggc ggtgtacgtg gacgaggctg 18780
ctcctgttct tgttgtagtc gccgactgtc gtgtctcgtt ttagatccct ccattatcgc 18840
gattgcgtag atggagtact attatatacc ttgtaattaa atttttttat taattaaacg 18900

```

-continued

---

tataaaaaagc ttccgtatct gtattttaaga gccagatttc gtctaataga acaaatagct 18960  
acagtaaaaa taactagaat aattgctaca cccactagaa accacggatc gtaatacggc 19020  
aatcgggtttt cgataatagg tggaacgtat attttattta aggacttaac aattgtctgt 19080  
aaaccacaat ttgcttcocg ggatcctgta ttaactatct gtaaaagcat atgttgaccg 19140  
ggcggagccg aacattctcc gatatctaatt ttctgtatat ctataatatt attaacctcc 19200  
gcatacgcac tacagttcct ttctagcttg gataccgcac taggtacatc gtctagatct 19260  
attcctattt cctcagcgat agctcttcta tccctttccg gaagcaatga aatcacttca 19320  
ataaatgatt caaccatgag tgtgaaacta agtcgagaat tactcatgca ttgttagtt 19380  
attcggagcg cgcaattttt aaactgtcct ataactctc ctatatgaat agcacaagt 19440  
acattagtag ggatagaatg ttgagctaatt ttttgtaaat aactatctat aaaaagatta 19500  
tacaagttt taaactcttt agtttccgcc atttatccag tctgagaaaa tgtctctcat 19560  
aataaatttt tccaagaaac taattgggtg aagaatggaa acctttaatc tatatttatt 19620  
acagtctgtc ttggtacaca tgatgaatc ttctaagtct gtactaaatt cgatatcttt 19680  
ttcgatttct ggatattgtt ttaataaagt atgaacaaag aaatggaaat cgtaatacca 19740  
gttatgttca actttgaaat tgttttttat tttctgttta atgattccag ccacttggga 19800  
aaagtcaaag tcgtttaatg ccgatttaac acgttcatta aaaacaaact ttttctcctt 19860  
tagatgaatt attattgggt catttgaatc aaaaagtaag atattatcgg gtttaagatc 19920  
tgcgtgtaaa aagtgtcgc aacagggtag ttcgtagatt ttaatgtata acagagccat 19980  
ctgtaaaaag ataaacttta tgtattgtac caaagattta aatcctaatt tgatagctaa 20040  
ctcggtatct actttatctg ccgaatacag tgctagggga aaaattataa tgtttcctct 20100  
ttcatattcg tagttagttc tcttttcatg ttcgaaaaag tgaaacatgc ggttaaaata 20160  
gtttataaca ttaatattac tgttaataac tgccggataa aagtgggata gtaatttcac 20220  
gaatttgata ctgctcttcc tctcgttaaa cgcctttaa aaaaacttag aagaatctct 20280  
caatgagagt tcccgaccat ccatagtttg tatcaataat agcaacatag gaagaacccg 20340  
tttatacaga gtatgtaaaa atgttaattt atagttaat cccatggccc acgcacacac 20400  
gattaatttt tttcatctc cctttagatt gttgtataga aatttgggta ctgtgaactc 20460  
cgccgtagtt tccatgggac tatataattt tgtggcctcg aatacaaat ttactacata 20520  
gttatctatc ttaaagaacta taccatattc tccgttagat atgtgataaa aatcgtcgtt 20580  
tataggataa aatcgtttat ccttttgttg gaaaaggat gaattaatgt aatcattctc 20640  
ttctatcttt agtagtgttt ccttattaaa attcttaaaa taatttaaca atctaactga 20700  
cggagcccaa ttttgggtga aatctaattg ggacattata ttgttaaaat acaaacagtc 20760  
tcctaataata acagtatctg ataactatg gggagacatc cattgatatt caggggatga 20820  
atcattggca acaccattt attgtacaaa aagccccaat ttacaaacga aagtccaggt 20880  
ttgatagaga caaactatta actattttgt ctctgttttt aacacctcca cagtttttaa 20940  
tttctttagt aatgaaatta ttcacaatat cagtatctc tttatctacc agagatttta 21000  
ctaacttgat aaccttggct gtctcattca atagggtagt gatatttga tgtgtgat 21060  
tgatatcttt ttgaattgtt tcttttagaa gtgattcttt gatgggtcca gcatacgaat 21120  
tacaataatg cagaaactcg gttaacatgc aggaattata gtaagccaat tccaattgtt 21180  
gcctgtgttg tattagagtg tcaatatgag caatgggtgc cttgcgttcc tctgatagaa 21240

-continued

---

tgcgagcagc	gattttggcg	tatcatttg	acgatattc	tggaaatgacg	aatcctgttt	21300
ctactaactt	tttggttaga	caaagtga	caatcaagaa	gatagcttct	cctcctattt	21360
gtggaagaaa	ttgaactcct	ctagatgac	tactgacgat	agtatctcct	tgacagatat	21420
tggaccgaat	tacagaagta	cctggaatgt	aaagcctga	aacccctca	tttttaagc	21480
agattgttgc	cgtaaatcct	gcactatgcc	caagatagag	agctcctttg	gtgaatccat	21540
ctctatgttt	cagtttaacc	aagaaacagt	cagctggtct	aaaatttcca	tctctatcta	21600
atacagcatc	taacttgatg	tcaggaacta	tgaccggttt	aatgttatat	gtaacattga	21660
gtaaatcctt	aagttcataa	tcatactgt	catcagttat	gtacgatcca	aacaatgttt	21720
ctaccggcat	agtggatagc	aagatgctat	ccatcagaat	gtttccctga	ttagtatttt	21780
ctatatagct	attcttcttt	aaacgatttt	ccaaatcagt	aactatgttc	atttttttag	21840
gagtaggacg	cctagccagt	atggaagagg	atttcttaga	tcctctcttc	aacatctttg	21900
atctcgatgg	aatgcaaac	cccatagtga	aacaaccaac	gataaaaata	atattgtttt	21960
tcacttttta	taattttacc	atctgactca	tggattcatt	aatatcttta	taagagctac	22020
taacgtataa	ttctttataa	ctgaactgag	atatatacac	cggatctatg	gtttccataa	22080
ttgagtaaat	gaatgctcgg	caataactaa	tggcaaatgt	atagaacaac	gaaattatac	22140
tagagtgttt	aaagttaata	ttttctatga	gctgttccaa	taaattattt	gttgtaactg	22200
cgttcaagtc	ataaatcatc	ttgatactat	ccagtaaacc	gtttttaagt	tctggaatat	22260
tatcatccca	ttgtaaagcc	cctaattcga	ctatcgaata	tcctgctctg	atagcagttt	22320
caatatcgac	ggacgtcaat	actgtaataa	aggtggtagt	attgtcatca	tcgtgataaa	22380
ctactggaat	atggctgtta	gtaggtacgg	taactttaca	caacgcgata	tataactttc	22440
cttttgtacc	atttttaacg	tagttgggac	gtcctgcagg	gtattgtttt	gaagaaatga	22500
tatcgagaac	agatttgata	cgatatttgt	tggattcctg	attattcact	ataatataat	22560
ctagacagat	agatgattcg	ataaatagag	aaggtatatac	gttggttaga	taatacatcc	22620
ccattccagt	attctcggat	actctattga	tgacactagt	taagaacatg	tcttctatcc	22680
tagaaaacga	aaacatccta	catggactca	ttaaaacttc	taacgctcct	gattgtgtct	22740
cgaatgcctc	gtacaaggat	ttcaaggatg	ccatagattc	ttgaccaac	gattttagaat	22800
tgcgttttagc	atctgatttt	tttattaaat	cgaatggtcg	gctctctggg	ttgctacccc	22860
aatgataaca	atagtcttgt	aaagataaac	cgcaagaaaa	tttatacgca	tccatccaaa	22920
taaccctagc	accatcggat	gatattaatg	tattattata	gattttccat	ccacaattat	22980
tgggocagta	tactgttagc	aacggtatat	cgaatagatt	actcatgtaa	cctactagaa	23040
tgatagttcg	tgtactagtc	ataatatctt	taatccaatc	taagaaattt	aaaattagat	23100
tttttacact	gttaaagtta	acaagggtat	taccgggata	cgtaggatatac	atatatggca	23160
ttggtccatt	atcagtaata	gctccataaa	ctgatacggc	gatgggtttt	atatgtgttt	23220
gatctaacga	ggaagaaatt	cgcccccaca	atcactctct	agatatgtat	ttaatatcaa	23280
acggtaaacac	atcaatttcg	ggacgcgat	atgtttctaa	atttttaatc	caaatataat	23340
gatgacctat	atgccctatt	atcatactgt	caactatagt	acacctaggg	aacttacgat	23400
acatctgttt	cctgtaatcg	ttaaatttta	caaatctata	acatgctaaa	ccttttgacg	23460
acaaccattc	attaatttct	gatatggaat	ctgtattctc	aataccgtat	cgttctaaag	23520
ccagtgctat	atctcctgt	tcgtgagaac	gctttcgtat	aatatcgatc	aacggataat	23580
ctgaagtttt	tggagaataa	tatgactcat	gatctatttc	gtccataaac	aatctagaca	23640

-continued

---

taggaattgg aggcgatgat cttaattttg tgcaatgagt cgtcaatcct ataacttcta 23700  
atcttgtaat attcatcacc gacataatac tatctatggt atcatcgat attagtatac 23760  
cacggccttc ttcatttcgt gccaaaatga tatacagctc taaatagtta cgcaatatct 23820  
caatagtttc ataattgta gctgttttca tcaagatttg taccctgttt aacatgatgg 23880  
cgttctataa cgtctctatt ttctattttt aattttttaa atttttaacg atttactgtg 23940  
gctagatacc caatctctct caaatatttt tttagcctcg cttacaagct gtttatctat 24000  
actattaaaa ctgacgaatc cgtgattttg gtaatggggt ccgctgaaat ttgccgaagt 24060  
gatatgaaca tattcgtcgt cgactatcaa caattttgta ttattctgaa tagtgaaaac 24120  
cttcacagat agatcatttt gaacacacaa cgcactctaga cttttggcgg ttgccataga 24180  
atatacgtcg ttcttatccc aattaccaac tagaagctcg atcttaactc ctctattaat 24240  
ggctgcttct ataatggagt tgtaaatgct gggccaatag tagctattac cgtcgcacacg 24300  
tgtagtggga actatggcca aatgttcaat atctatacta gtcttagccg acttgagttt 24360  
atcaataact acatcgggat ctgagctctc agaatatccc aataggtgtt ccgggagaatc 24420  
agtaagaac actccaccta taggattctt aatatgatac gcagtgctaa ctggcaaaca 24480  
acaagccgca gagcataaat tcaacatga attttttgcg ctattaaagg ctttaaaagt 24540  
atcaaatctt ctacgaagat ctgtggccag cgggggataa tcagaatata cacctaactg 24600  
tttaacgta tgtatagatc ctccagtaaa tgacgcgttt cctacataac atctttcacc 24660  
atctgacacc caaaaaaac cgagtagtag tcccacatta ttttttttat ctatattaac 24720  
ggttataaaa tttatatccg ggcagtgact ttgtagctct ccagatttc ttttccctcg 24780  
ttcatctagc aaaactatta ttttaatccc tttttcagat gcctctttta gtttatcaaa 24840  
aataagccgc cccctagtcg tactcagagg attacaacaa aaagatgcta tgtatatata 24900  
ttcttagct agagtgataa tttcgtaaa acattcaaat gttgttaaat gatcggatct 24960  
aaaatccata ttttctggta gtgtttctac cagcctacat tttgtcctcg caggtaaccg 25020  
tgcaaatggc cacatttagt taacataaaa acttatacat cctgttctat caacgattct 25080  
agaatatcat cggctatata gctaaaattt tcatcaaagt cgacatcaca acctaactca 25140  
gtcaatatat taagaagttc catgatgtca tctctgtcta tttctatata cgtatccatt 25200  
gtagattggt gaccgattat cgagtttaaa tcattactaa tactcaatcc ttcagaatac 25260  
aatctgtggt tcattgtaaa tttataggcg gtgtatttaa gttggtagat tttcaattat 25320  
gtattaatat agcaacagta gttcttctc ctccttgatt ctagcactct ctccattatt 25380  
ttctctacg tacataaaca tgtccaatac gttagacaac acaccgacaa tggcggccgc 25440  
cacagacacg aatatgacta aaccgatgac catttaaaaa cccctctcta gctttcactt 25500  
aaactgtatc gatcattctt tttagcacatg tataatataa aaacattatt ctatttcgaa 25560  
tttaggcttc caaaaatttt tcatccgtaa accgataata atatataatag acttgtaaat 25620  
agtcggaata aatagattaa tgcctaaact atcatcatct ccacgattag agatacaata 25680  
tttacattct ttttctggtt tcgaaaactt atcaatacac gtttaataca acccaggaag 25740  
gagatattga aactgaggct gttgaaaatg aaacggtgaa tacaataatt cagataatgt 25800  
aaaatcatga ttccgtatcc tgatgatatt agaactgcta atggatgtcg atggatgta 25860  
tctaggagta tctattttaa caaagcatcg atttgctaat atacaattat ccttttgatt 25920  
aattgttatt ttattcatat tcttaaaagg tttcatattt atcaattctt ctacattaaa 25980

-continued

---

```

aatttcatt ttaatttat gtagccccc aatactctc attacgttcc attttttgc 26040
tataatatcc attttgttca tctcgggtaca tagattatcc aattgagaag cgcatttagt 26100
agttttgtac attttaagtt tattgacaaa tcgtcgaaaa ctagttagatag ttaacatttt 26160
attatttgat accctgatat taataccoct gccgttacta ttatttataa ctgatgtaac 26220
ccacgtaaca ttagaattaa ttatcgatag taatgcatac acgcttccaa aattgtctat 26280
tataaactca ccgataattt ttttattgca tgttttcata ttcattagga ttatcaaate 26340
tttaacttta ttacgattgt atgcggtgat attacaagac gtcattctaa aagacggagg 26400
atttccatca aatgccagac aatcacgtac aaagtacatg gaaataggtt ttgttctatt 26460
gcgcatcata gatttatata gaacacccgt agaaatacta atttgtttta ctctataaaa 26520
tactaatgca tctatttcat cgttttggat aacgtcttcc caagtgtcaa attccaaatt 26580
tttttcattg atagtaccaa attcttctat ctctttaaact acttgcatag ataggtaatt 26640
acagtgatgc ctacatgccg ttttttgaaa ctgaatagat gcgtctagaa gcgatgtac 26700
gctagtacac atcaccactt tcatatttag aatatatgta tgtaaaaaata tagtagaatt 26760
tcattttggt tttttctatg ctataaatga attctcattt tgcactctgt catactccgt 26820
tttatatcaa taccaaagaa ggaagatata tggttctaaa agccgttaaa gtatgcgatg 26880
ttagaactgt agaatgcgaa ggaagtaaag cttctctcgt actcaaagta gataaacctt 26940
catcgcgccg gtgtgagaga agaccttccg ccccgccag atgcgagaga atgaataacc 27000
ctggaaaaca agttccggtt atgagaacgg acatgtctca aaatatgttc gcggctaate 27060
gcgataatgt agcttctaga cttttgtcct aaaatactat tataccttt tcgatattaa 27120
taaatccgtg tcgtccaggt tttttatctc tttcagtagt tgaatagata ggtattttat 27180
ctctattcat catcgaattt aagagatccg ataaacattg tttgtattct ccagatgtca 27240
gcatctgata caacaatata tgtgcacata aacctctggc acttatttca tgtaccttcc 27300
ccttatcact aaggagaata gtatttgaga aatatgtata catgatatta tcatgaatta 27360
gatatacaga atttgtaaca ctctcgaaat cacacgatgt gtcggcggtta agatctaata 27420
tatcactcga taacacattt tcatctagat aactagaca ttttttaaag ctaaaatagt 27480
ctttagtagt gacagtaact atgcgattat tttcatcgat gatacatttc atcggcatat 27540
tattacgctt accatcaaag actataccat gtgtatatct aacgtattct agcatgggtg 27600
ccatacgcgc attaaacttt tcaggatcct tggatagatc ttccaatcta tctatttgag 27660
aaaacatttt tatcatgttc aatagttgaa acgtcggatc cactatatag atattatcta 27720
taaagatttt aggaactacg ttcatgggtat cctggcgaat attaaaacta tcaatgatat 27780
gattatcgtt ttcattttt atcaccatat agtttctaag atatgggatt ttacttaata 27840
taatattatt tcccgtgata aattttatta gaaaggccaa atctataaga aaagtccatg 27900
aattagtcgt aagaatatct atatcgccgt atagtatatt tggattaatt agatatagag 27960
aatatgatcc gtaacatata caacttttat tatggcgtct aagatattct tccatcaact 28020
tattaacatt tttgactagg gaagatacat tatgacgtcc cttactttt gccttgtcta 28080
ttactgcgac gttcatagaa tttagcatat ctcttgccaa ttcttccatt gatgttacct 28140
tataagaaat tttagatgaa attacatttg gagctttaat agtaagaact cctaataatgt 28200
ccgtgatgtt ggtcactaat acagattgta gttctataat cgtaaaataa ttacctatat 28260
tatatgtttg agtctgttta gaaaagtagc taagtatacg atcttttatt tctgatgcag 28320
atgtattaac atcggaaaaa aatctttttt tattcttttt tactaaagat acaaatatgt 28380

```

-continued

---

ctttgtaaa aacagttatt ttctgaatat ttctagcttg taattttaac atatgatatt 28440  
 cgttcacact aggtactctg cctaaatagg tttctataat ctttaatgta atattaggaa 28500  
 aagtattctg atcaggattc ctattcattt tgaggattta aaactctgat tattgtctaa 28560  
 tatggtctct acgcaaaact tttcacagag cgatagagtt tttgataact cgtttttctt 28620  
 aagaaatata aaactactgt ctccagagct cgctctatct tttattttat ctaattcgat 28680  
 acaaactcct gatactgggt cagaaagtaa ttcattaatt ttcagtcctt tatagaagat 28740  
 atttaatata gataatacaa aatcttcagt ttttgatata gatctgattg atctagaac 28800  
 tagatatatt aataacgtgc tcattaggca gtttatggca gcttgataat tagatatagt 28860  
 atattccagt tcataattat tagataccgc attgccaga ttttgatatt ctatgaattc 28920  
 ctctgaaaat aaatccaaaa taactagaca ttctattttt tgtggattag tgtactctct 28980  
 tccctctatc atgttcaacta ctgggtgcc cgatgataaa tatctagagg gaatataata 29040  
 tagtccatag gatgccaatc tagcaatgtc gaataactgt aatttgattc ttcgttcttc 29100  
 attatgaatt gattcttgag gtataaacct aacacaaatt atattattag actttctgta 29160  
 tgtaatgtct ttcattgtat aagtttttaa tcttggataa gaatctattt taatgaggct 29220  
 tttaaacgca gagttctoca acgagtcaaa gcataaact ctgttgtttt tcttatatac 29280  
 gatgttacga ttttctctt tgaatggaat aggtttttga attagtttat aattacaaca 29340  
 taatagataa ggaagtgtgc aaatagtacg cggaaaaaac ataatagctc cctgttttc 29400  
 atccatgggt ttaagtaaat gatcactggc ttccttagtc aatggatatt cgaacattaa 29460  
 cggttctac atcattggac agaatccata ttttttaatg taaagagtga tcaaatcatt 29520  
 gtgtttattg taccatcttg ttgtaaatgt gtattcgggt atcggatctg ctctttttc 29580  
 tattaagta tcgatatoga tctcgtctaa gaattcaact atatogacat atttcatttg 29640  
 tatacacata accattaacta acgtagaatg tataggaaga gatgtaacgg gaacaggggt 29700  
 tgttgattcg caaactattc taatacataa ttcttctgtt aatacgtctt gcaogtaac 29760  
 tattatagat gccagatat ctatataatt attttgaag atgatgttaa ctatgtgatc 29820  
 tatataagta gtgtaataat tcatgtattt tgatatatgt tccaactctg tctttgtgat 29880  
 gtctagtttc gtaatatcta tagcatctc aaaaaatata ttcgatata tcccaagtc 29940  
 ttcagttcta tcttctaaaa aatcttcaac gtatggaata taataatcta ttttaactct 30000  
 tctgatatca ttaatgatat agtttttgac actatcttct gtcaattgat tcttattcac 30060  
 tatatctaag aaacggatag cgtccctagg acgaaactact gccattaata tctctattat 30120  
 agcttctgga cataatcoat ctattatacc agaattaatg ggaactattc cgatctatc 30180  
 taacatagtt ttaagaaagt cagaatctaa gacttgatgt tcatatattg gttcacaat 30240  
 gaaatgatct ctattgatga tagtgactat ttcattctct gaaaattggt aactcattct 30300  
 atatatgctt tccttgttga tgaaggatag aatatactca atagaatttg tacciaacaaa 30360  
 ctgttctctt atgaatcgta tatcatcacc tgaataatc atgtaaggca tacatttaac 30420  
 aattagagac ttgtctctg ttatcaatat actattcttg tgataattta tgtgtgaggc 30480  
 aaatttgcc acgttcttta attttgttat agtagatata aatccaatg gagctacagt 30540  
 tcttggctta aacagatata gttttctgg aacaaattct acaacattat tataaaggac 30600  
 tttgggtaga taagtgggat gaaatcctat tttaattaat gcgatagcct tgtcctcgtg 30660  
 cagatatcca aacgcttttg tgatagtatg gcattcattg tctagaaacg ctctacgaat 30720

-continued

---

atctgtgaca gatatcatct ttagagaata tactagtcgc gttaatagta ctacaatttg 30780  
tattttttaa tctatctcaa taaaaaatt aatgtgatg attcaatgta taactaaact 30840  
actaactggt attgataact agaactcagaa tctaagatg acgtaacca gaagtttatc 30900  
tactgccaat ttagctgeat tatttttagc atctcgttta gattttccat cggccttatc 30960  
gaatactctt ccgctgatgt ctacacaggc ataaaatgta ggagagtac taggccccac 31020  
tgattcaata cgaaaagacc aatctctctt agttatttgg cagtactcat taataacggt 31080  
gacagggta gcacctttcc aatcaataat ttttttagcc ggaataacat catcaaaaga 31140  
cttatgatcc tctctcattg atttttcgcg ggatacatca tctattatga cgtcagccat 31200  
agcatcagca tccggcttat ccgctcctgt tgtcataaac caacgaggag gaatatcgtc 31260  
ggagctgtac accatagcac tacggtgaag atcgtacaga gctttattaa cttctcgtt 31320  
ctccatatta agttgtctag ttagtgtgct agcagtagct ccttcogattc caatggtttt 31380  
aatagcctca cacacaatct ctgcgtcaga acgctcgtca atatagatct tagacatttt 31440  
tagagagaac taacacaacc agcaataaaa ctgaacctac tttatcattt tttattcat 31500  
catcctctgg tggttctgctg ttcctatcga atgtggatct gattaaccgg tcatctatag 31560  
gtgatgctgg ttcggagat tctggaggag atggattatt atctggaaga atctctgta 31620  
tttcttgtt ttcattgctc gattgcgttg taacattaag attgcgaaat gctctaaatt 31680  
tgggaggctt aaagtgtgtt ttgcaatctc tacacgcgtg tctaactagt ggaggttcgt 31740  
cagcggctct agtttgaatc atcatcgtg tagtattcct acttttacag ttaggacacg 31800  
gtgtattgta tttctcgtcg agaacgttaa aataatcgtt gtaactcaca tcctttattt 31860  
tatctatatt gtatttctact cttttcttaa tgcattttat accgaataag agatagcgaa 31920  
ggaattcttt ttccgtgctg ctagtacct taatcatatc acatagtgtt ttatattcca 31980  
aatttgtggc aatagacggt ttatttctat acgatagttt gtttctggaa tcctttgagt 32040  
attctatacc aatattatc tttgattcga atttagtttc ttcgatatta gattttgtat 32100  
tacctatatt cttgatgtag tactttgatg atttttccat ggcccattct attaagtctt 32160  
ccaagtggc atcatccaca tattgtgata gtaattctcg gatatcagta gcggttaccg 32220  
ccattgatgt ttgttcattg gatgagtaac tactaatgta tacattttcc atttataaca 32280  
cttatgtatt aactttgttc atttatattt tttcattatt atgttgatata taacaaaagt 32340  
gaatataat atgttaataa ttgtattgtg gttatcggc tacaatttta taatgagtga 32400  
aagtcagtgt ccgatgatca atgacgatag ctttactctg aaaagaaagt atcaaatcga 32460  
tagtgcggag tcaacaataa aaatggataa gaagaggata aagtttcaga atagagccaa 32520  
aatggtaaaa gaaataaatc agacaataag agcagcacia actcattacg agacattgaa 32580  
actaggatc ataaaaattta agagaatgat tatgactact actctagaag atatagcacc 32640  
atctattcca aataatcaga aaactataa actattctcg gacatttcag ccatcggcaa 32700  
agcatcacag aatccgagta agatggata tgctctgctg ctttacatgt ttccaattt 32760  
gtttggagat gaccatagat tcattcgtta tagaatgeat ccaatgagta aatcaaaaca 32820  
caagatcttc tctcctttca aacttaatct tattagaata ttagtggaag aaagattcta 32880  
taataatgaa tgcagatcta ataaatggag aataattgga acacaagttg ataaaatggt 32940  
gatagctgaa tctgataaat atacaataga tgcaaggat aacctaaaac ccatgtatag 33000  
aatcaaggga gaatctgaag aagataacct ctttatcaaa cagatggtag aacaatggt 33060  
gacatcccag gaattggtgg aaaaagtgtt gaagatactg tttagagatt tgttcaagag 33120

-continued

---

tggagaatac aaagcgtaca gatacgatga tgatgtagaa aatggattca ttggattgga 33180  
 tacactaaaa ttaaacattg ttcattgat agttgaacca tggatgcctg ttcgtaggcc 33240  
 agtggctaag atactgtgta aagaaatggt aaataaatc tttgagaatc cgctacatat 33300  
 tattggtaaa aatcttcaag agtgcattga ctttgtagt gaataggcat ttcattcttc 33360  
 tccaatacta attcaaattg ttaaattaat aatggatagt ataaatagtt attagtata 33420  
 aatagtaaa aataattatt agaataagag tgtagtatca tagataactc tcttctataa 33480  
 aatggattt tattcgtaga aagtatctta tatacacagt agaaaaaat atagattttt 33540  
 taaaggatga tacattaagt aaagtaaca attttaccct caatcatgta ctactctca 33600  
 agtatctagt tagcaatttt cctcaacatg ttattactaa ggatgtatta gctaatacca 33660  
 atttttttgt tttcatacat atggtagcat gttgtaaagt gtacgaagcg gttttacgac 33720  
 acgcatttga tgcaccacag ttgtacgta aagcattgac taagaattat ttatcgttta 33780  
 gtaacgcaat acaatcgtac aaggaaaccg tgcataaact aacacaagat gaaaaatttt 33840  
 tagagggtgc cgaatacatg gacgaattag gagaacttat aggcgtaaat tatgacttag 33900  
 ttcttaatcc attatttcac ggaggggaa ccatcaaaga tatggaaatc atttttttaa 33960  
 aactgtttaa gaaaacagac ttcaaagtgt ttaaaaaatt aagtgttata agattactta 34020  
 tttgggcata cctaagcaag aaagatagag gcatagagtt tgcgggataat gatagacaag 34080  
 atatatatac tctatttcaa caaactggta gaatcgtcca tagcaatcta acagaaacgt 34140  
 ttagagatta tatcttccc ggagataaga ctactattg ggtgtggta aacgaaagta 34200  
 tagctaatga tgcggatc gttcttaata gacacgccat taccatgtat gataaaattc 34260  
 ttagttatat atactctgag ataaaacaag gacgcgttaa taaaacatg cttaagttag 34320  
 tttatatctt tgagcctgaa aaagatatca gagaacttct gctagaaatc atatatgata 34380  
 ttctgggaga taccctatct attattgatg caaaaaacga cgattggaaa aaatatttta 34440  
 ttagttttta taaagctaatt tttattaacg gtaatacatt tattagtgat agaacgttta 34500  
 acgaggactt attcagagtt gttgttcaaa tagatccga atatttcgat aatgaacgaa 34560  
 ttatgtcttt attctctacg agtgcctgag acattaaacg atttgatgag ttagatatta 34620  
 ataacagtta tatatctaata ataatattg aggtgaacga taccacatta gatacaatgg 34680  
 atgatatgaa aaagtgtcaa atctttaacg aggatcctgc gtattatggt aaggaatata 34740  
 atacatacct gtttttgcac gagtcggatc ccatggatc agagaacgga atactaaaa 34800  
 aactgtcacc tataaaatcc aagagtagac ggctgaactt gtttagcaaa aacattttaa 34860  
 aatattattt agacggacaa ttggctcgtc taggtctgtt gtttagatgat tataaaggag 34920  
 acttgtagt taaaatgata aaccatctta agtctgtgga ggatgtatcc gcattcgttc 34980  
 gattttctac agataaaaac ctagtattc ttccatcgtc aatcaaaact attttagcta 35040  
 gttataatat ttccatcacc gtcttatttc aaaggttttt gagagataat ctatatcatg 35100  
 tagaagaatt cttggataaa agcatccacc taaccaagac ggataagaaa tatatacttc 35160  
 aattgataag acacggtaga tcatagaaca gaccaaata attattaata atttgatat 35220  
 acatagatat aattatcaca catttttgat aaatgggaa tgcctgcaaca attcagactc 35280  
 ccaccaaatt aatgaataaa gaaaatgcag aatgatttt ggaaaaaatt gttgatcata 35340  
 tagttatgta tattagtacg gaatcaagtg attcagaaaa taactctgaa tatattgatt 35400  
 ttcgtaacag atacgaagac tatagatctc tcattataaa aagtgatcac gagtttgtaa 35460

-continued

---

```

agctatgtaa aatcatgcg gagaaaagtt ctccagaaac gcaacaaatg attatcaaac 35520
acataacga acaatatctt attocagtat ctgaagtact attaaaacct ataatgtcca 35580
tgggtgacat aattacatat aacggatgta aagacaatga atggatgcta gaacaactct 35640
ctaccctaaa ctttaacaat ctccgcacat ggaactcatg tagcatagggc aatgtaacgc 35700
gtctgtttta tacatttttt agttatctga tgaaagataa actaaatata taagtataat 35760
cccattctaa tactttaacc tgatgtatta gcatcttatt agaattataa cctaactaaa 35820
agacataaca taaaaactca ttacatagtt gataaaaagc ggtaggatat aatattatg 35880
gctgccaccg ttccgcgctt tgacgacgtg taaaaaatg cacaagaag aattctagat 35940
caagaacat ttttagtag aggtctaagt agaccgtaa tgaaaaacac atatctattt 36000
gataattaog cgtatggatg gataccagaa actgcaattt ggagtagtag atacgcaaac 36060
ctagatgcta gtgactatta tcccatttctg ttgggattac ttaaaaagtt cgagtttctc 36120
atgtctctat ataaaggctc tattccgta tatgaagaaa aagtaaatac tgaattcatt 36180
gctaattgat cgttctctgg tagatacgtc tcatacttc gaaagtttctc tgctcttcca 36240
acaaacgagt ttattagttt tttgttactg acttccattc caatctataa tatcttgctc 36300
tggtttaaaa atacacagtt tgatattact aaacacacat tattcagata cgtctataca 36360
gataatgcca aacacctggc gttggctagg tatatgcatc aaacaggaga ctataagcct 36420
ttgtttagtc gtctcaaga gaattatata ttaccggtc ccgttccaat aagtatcaaa 36480
gatatagatc accctaactc tagtagagca agaagtcctc ccgattatga gacattagct 36540
aatattagta ctatattgta ctttaccag tatgatccgg tattaatggt tttattggtt 36600
tacgtacctg ggtattcaat tactacaaaa attactccag ccgtagaata tctaattgat 36660
aaactgaatc taacaaagag cgacgtacaa ctggtgtaa ttattttatg ctctgtaaaa 36720
tgtaggtttt gaaccaaaca ttctttcaaa gaatgagatg cataaaactt tattatccaa 36780
tagattgact atttcggacg tcaatcgctt aaagtaaact tcgtaaaata ttctttgatc 36840
actgccgagt ttaaaacttc tatcgataat tgtttcatat gttttaatat ttacaagttt 36900
tttggccat ggtacattag gacaaatata tgcaaaataa tatcgttctc caagttctat 36960
agtctctgga ttatttttat tatattcagt aaccaaatac atattagggg tatctcggga 37020
tttataattt gagtgatgca ttgcactcaa cataaataat tctaaggag acgatctact 37080
atcaaatcog gatcgtaaat ctgtttctaa agaacggaga atatctatac atacctgatt 37140
agaattcatc cgtcctcag acaacatctc agacagtctg gtcttgatg tcttaatcat 37200
attctatga aacttgaaa catctcttct agtttacta gtacctttat taattctctc 37260
aggtacagat tttgaattcg acgatgctga gtattctatc gttgtatatt tcttctcga 37320
tgcataatc agattcttat ataccgctc aaactctatt ttaaaattat taaacaatac 37380
tctattatta atcagtcggt ctaactcctt tgctatttct atggacttat ctacatctg 37440
actgtctatc tctgtaaaaca cggagtcggt atctccatac acgctacgaa aacgaaactc 37500
gtaatctata ggcaacgatg ttttcacaat cggattaata tctctatcgt ccatataaaa 37560
tggattactt aatggattgg caaacgtaa catacgtta gataactctg ctccatttag 37620
taccgattct agatacaaga tcattctacg tctatggat gtgcaactct tagccgaagc 37680
gtatgagat agagcactat ttetaaatcc catcagacca tatactgagt tggctactat 37740
cttgtagta tattgcatgg aatcataaat ggccttttca gttgaaactg tagcctggtt 37800
taacatcttt ttatctctg ctctctctgc caaaaatggt cttaatagtc taggaatggt 37860

```

-continued

---

tccttctatc gatctatoga aaattgctat ttcagagatg aggttcggta gtctaggttc 37920  
 acaatgaacc gtaatatatc taggaggtgg atatttctga agcaagagct gattatttat 37980  
 ttcttcttcc aatctattgg tactaacaac gacaccgact aatgtttccg gagatagatt 38040  
 tccaaagata cacacattag gatacagact gttataatca aagattaata cattattact 38100  
 aaacattttt tgttttggag caaatacctt accgccttca taaggaaact tttgttttgt 38160  
 ttctgatcta actaagatag ttttagtttc caacaatagc tttaacagtg gacccttgat 38220  
 gactgtactc gctctatatt cgaataccat ggattgagga agcacatag ttgacgcacc 38280  
 cgcgtctgtt tttgtttcta ctccataata ctcccacaaa tactgacaca aacaagcatc 38340  
 atgaatacag tatctagcca tatctaagc tatgtttaga ttataatcct tatacatctg 38400  
 agctaaatca acgctatcct ttcgaaaga taatttatat gtatcattag gtaaagtagg 38460  
 acataatagt acgacttta atccattttc ccaaatatct ttacgaatta cttacatat 38520  
 aatctcctca tcaacagtca cataattacc tgtggttaaa acctttgcaa atgcagcggc 38580  
 tttgccttcc gcgtctgtag tatcgtcacc gatgaacgtc atttctctaa ctctctatt 38640  
 taatacttta cccatgcaac tgaacgcgtt cttggatata gaatccaatt tgtacgaatc 38700  
 caatttttca aatttttgaa tgaatgaata tagatcgaaa aatatagttc cattattgtt 38760  
 attaacgtga aacgtagtat tggccatgcc gctactccc ttatgactag actgatttct 38820  
 ctcataaata cagagatgta cagcttctt tttgtccgga gatctaaaga taatcttctc 38880  
 tcctgttaat aactctagac gattagtaat atatctcaga tcaaagttat gtcogttaa 38940  
 ggtaacgaag tagtgcgaag ttagttocaa caattgttta gctattcgtg acaaaactat 39000  
 ttcagaacat aaaactagtt ctcgttcgtat atccatttcc attagtgact gtatcctcaa 39060  
 acatcctcta tgcacggcct cttgtatttc ctggtccggt aacatctctt cattaatgag 39120  
 cgtaaaccaat aatcgtttac cacttaaatc gatataacag taacttgtat gcgagattgg 39180  
 gtaataaat acagaaggaa acttcttctc gaagtgcac tctatatcta gaaataagta 39240  
 cgatcttggg atatcgaatc taggtatttt tttagcgaag cagttacgtg gatcgtcaca 39300  
 atgataacat ccattgttaa tctttgtcaa atattgctcg tccaacgagt aacatccgtc 39360  
 tggagatata ccgtagaaa tataaaacca actaatattg agaaattcat ccatggtggc 39420  
 attttgtatg ctgcgttctt ttggctcttc tatcaaccac atatctgcga cggagcattt 39480  
 tctatcttta atatctagat tataacttat tgtctcgtca atgtctatag ttctcatctt 39540  
 tcccaacggc ctgcattaa atggaggagg agacaatgac tgatatattt cgtccgtcac 39600  
 tacgtaataa aagtaatgag gaaatcgat aaatacggtc tcaccatttc gacatctgga 39660  
 tttcagatat aaaaatctgt tttcaccgtg actttcaaac caattaatgc accgaacatc 39720  
 ctttataga atttagaaat atattttcat ttaaatgaat cccaaacatt ggggaagagc 39780  
 cgtatggacc attattttta tagtacttcc gcaagcgggt ttagacggca acatagaagc 39840  
 gtgtaaacga aaactatata ctatagttag cactcttcca tgtcctgcat gtagacggca 39900  
 cgcgactatc gctatagagg acaataatgt catgtctagc gatgatctga attatattta 39960  
 ttattttttc atcagattat ttaacaattt ggcactctgat cccaaatagc cgatcgatgt 40020  
 gacaaaggtt aaccctttat aaacttaacc cattataaaa cttatgatta gtcacaactg 40080  
 aaataaccgc gtgattattt tttggtataa ttctacacgg catggtttct gtgactatga 40140  
 attcaacccc cgttacatta gtgaaatctt taacaaacag caagggttcg tcaaagacat 40200

-continued

---

```

aaaactcatt gtttacaatc gaaatagacc ccctatcaca cttaaaataa aaaatcct 40260
tatcctttac caccaaaataa aattctgatt ggtcaatgtg aatgtattca cttaacagtt 40320
ccacaaattht atttattaac tccgaggcac atacatcgtc ggtatthttt atggcaaaact 40380
ttactcttcc agcatccggt tctaaaaaaa tattaacgag ttccatttat atcatccaat 40440
attattgaaa tgacgttgat ggacagatga tacaataag aaggtagcgt acctttgtcc 40500
accatctcct ccaattcatg ctctatthttg tcattaactt taatgtatga aaacagtacg 40560
ccacatgctt ccatgacagt gtgtaaacct ttggatacaa aatgthttgac attagtataa 40620
ttgthcaaga ctgtcaatct ataatagata gtagctataa tatattctat gatggtattg 40680
aagaagatga caacctggc atattgatca thtaacacag acatggtatc aacagatagc 40740
ttgaatgaaa gagaatcagt aattggaata agcgtcttct cgatagagtg tccgtatacc 40800
aacatgtctg atatthttgat gtattccatt aaattattht gththttctt thtattctcg 40860
thaaacagca thttctgcaa cggaccccaa catcgttgac cgatthagtt ttgattgatt 40920
thtccgtgta atcgtatct agtcagatcg tatagctat ccaataatcc atcgtctgtg 40980
tgtagatcac atcgtacact ththtaattct ctatagaaga gcgacagaca tctggagcaa 41040
ttacagacag caatthtttt atctcttaca gatgtaagat actggaagac attcctatga 41100
tgatgcagaa thttggataa cacggtattg atggtatctg thaccataat tctthtgatg 41160
gctgatagtg tcagagcaca agatthtcaa tctthgacaa ththtagcac cattatctth 41220
gththgatat ctatatcaga cagcatggtg cgtctgacaa cacagggatt aagacggaaa 41280
gatgaaatga thctctcaac atcttcaatg gatacctgc thththttct ggcattatct 41340
atatgtcga gaatatctc tagagaatca gtatctthtt tgatgatagt ggatctcaat 41400
gacatgggac gtctaaaact tctatttcta tcaccagatt gcattggtgat ttgtcttctt 41460
tctthtatca taatgtaatc tctaaattca tcggcaaat gtctatatct aaaatcataa 41520
tatgatagt thacctctac aaatatctgt tctgccaatg thtagattat tacatcagtt 41580
ttgtattcca aatthaaatc ggcaacggat thaatthtt atctctctat taagtctcgt 41640
tcgataataa cagaatgtag ataatcattt aatccatcgt acatggttg aagatgcttg 41700
thgacaaat ctthtaattgt ctgtagaag gtgggactat atctaacatc thgattaata 41760
aaatthataa cattgtccat aggatactth gtaactagtt thatacacat ctcttcatcg 41820
gtaagthtag acagaatatc gtgaacaggt ggtatattat atctatcaga tatacgaaga 41880
acaatgtcca aatctatatt gthtaataa thtatatagat gtagcgtagc tctacagga 41940
atatctthta ctaagtcaat gatttcatca accgttagat ctatththaa gthaatcata 42000
taggcattga thththaaag gatgttagcc ttgactacat tctcattaat taaccattcc 42060
aagtcactgt gtgtaagaag atttatctct atcataagct tgactacatt tggthccgat 42120
accatthaaag aatcttatg atataaggaa acagatthta ggtactcatc tactctacaa 42180
gaatthtgga gagcctaac gatatcagtg acgthtatta thtcaggagg aaaaaacta 42240
acattgagaa tgcggaggt aatagcttcc agatacagtg atththggcaa tagthccgtg 42300
aatccataat ccagthaacac gagctggtgc thgctagaca cctthtcaat gthtaattht 42360
thtgaaataa gctthtgata agccttctc gcaaatccg gatacatgaa catgthggcg 42420
acatgattaa gtattgthtt thcattatth tctcaacaag thtcaatac ccaatagat 42480
gatagaatat caccatgc gtccatgtg tctatthcca acagthcgt atatccacca 42540
atagaagtht thccaaaaa gattctagga acagthctac caccagtht thgthcaaaa 42600

```

-continued

---

taatcccgca attcatttcc gggtttaaat tctttaatat cgacaatttc atacgctcct 42660  
 cttttgaaac taaacttatt tagaatatcc agtgcatttc tacaaaaagg acatgtaaac 42720  
 ttgacaaaaa ttgtcacttt gttattggcc aacctttggt gtacaaaattc ctcgccatt 42780  
 ttaatattta agtgatataa aactatctcg acttatttaa ctctttagtc gagatatatg 42840  
 gacgcagata gctatatgat agccaactac agaaggcaaa cgctataaaa aacataatta 42900  
 cgacgagcat atttataaat atttttattc agcattactt gatatagtaa tattaggcac 42960  
 agtcaaacat tcaaccactc tcgatacatt aactctctca ttttctttaa caaattctgc 43020  
 aatatcttgc taaaaagatt cttgaaactt tttagaatat ctatcgactc tagatgaaat 43080  
 agcgttcgtc aacatactat gttttgtata cataaaggcg cctattttaa cagtttctag 43140  
 tgacaaaatg ctagcgatcc taggactcct tagaatcaca tagattgacg attcgtctct 43200  
 cttagtaact ctagtataat aatcatataa tctagtacgc gaaataatat tacccttgac 43260  
 ttgaggagat ctaaacatc tagttttgag aacatcgata agttcatcgg gaatgacata 43320  
 catactatct ttaatagaac tcttttctc cagttgaatg gattcgtctc taaccaactg 43380  
 attaatgaga tcttctatct tatcatttcc cagatgatat gtatgtccat taaagttaaa 43440  
 ttgtgtagcg cttcttttca gcttagcagc caatacttta acatcactaa tatcgatata 43500  
 caaaggagat gatttatcta tggatttaag aattcgtttt tcgacatctg tcaaaacca 43560  
 ttcctttttg cctgtatcat ccagttttcc atcctttgta aagaaattat tttctactag 43620  
 actattaata agactgataa ggattcctcc ataattgcac aatccaaact ttttcacaaa 43680  
 actagacttt acgagatcta caggaatcgc tacttcagggt tttttagctt gtgatttttt 43740  
 cttttgcgga cttttctag taaccaactc atctaccatt tcattgattt tagcagttaa 43800  
 ataagcttcc aatgcacggg cactgatact attgaaaacg agttgatctt caaattccgc 43860  
 catttaagtt caccacaaa cttttaaata caaatatata aatagtagta gaataagaac 43920  
 tataaaaaaa ataataatta accaatacca accccaacaa ccggtattat tagttgatgt 43980  
 gactgttttc tcacactta gaacagattt aacaatttct ataaagtctg tcaaatcatc 44040  
 ttccggagac cccataaata caccacaaat agcggcgtac aacttatcca tttatacatt 44100  
 aaatattggc ttttctttat cgctatcttc atcatattca tcatcaatat caacaagtcc 44160  
 cagattacga gccagatttt cttctacatt ttcagtcatt gatacacggt cactatctcc 44220  
 agagagtcog ataacgtag ccaccacttc tctatcaatg attagtttct tgagcgcgaa 44280  
 tgtaattttt gtttccgttc cggatctata gaagacgata ggtgtgataa ttgccttggc 44340  
 caattgtctt tctcttttac tgagtgttc tagttcacct tctatagatc tgagaatgga 44400  
 tgattctcca gtcgaaacat attctacat ggatccgttt aatttgttga tgaagatgga 44460  
 ttcacctta aatgttttct ctgtaatagt ttccaccgaa agactatgca aagaatttgg 44520  
 aatgcgttcc ttgtgcttaa tgtttccata gacggcttct agaagttgat acaacatagg 44580  
 actagccgcg gtaactttta tttttagaaa gtatccatcg cttctatctt gtttagattt 44640  
 atttttataa agtttagtct ctccctocaa cataataaaa gtggaagtca tttgactaga 44700  
 taaactatca gtaagtttta tagagataga cgaacaatta gcgtattgag aagcatttag 44760  
 tgtaacgtat tcgatacatt ttgcattaga tttactaatc gattttgcat actctataac 44820  
 acccgcaaaa gtctgtagag aatcgctaga tgcagtaggt cttgggtgaag tttcaactct 44880  
 cttcttgatt accttactca tgattaaac taataaattg tactttgtaa tataatgata 44940

-continued

---

tatattttca	ctttatctca	tttgagaata	aaaatgtttt	tgtttaacca	ctgcatgatg	45000
tacagatttc	ggaatcgcaa	accaccagtg	gttttatttt	atccttgccc	aatgtgaatt	45060
gaatgggagc	ggatgceggg	ttcgtagta	gatagtacat	tcccgttttt	aaaccgagac	45120
tccatccgta	aaaatgcata	ctcgtagtt	tggaataact	cggatctgct	atatggatat	45180
tcatagattg	actttgatcg	atgaaggctc	cctgtctctc	agccattttt	atgatcgtct	45240
tttgggaat	ttcccaata	gttttataaa	ctcgcttaat	atcttctgga	aggtttgat	45300
tctgaatgga	tccaccatct	gccataatcc	tattcttgat	ctcatcattc	cataattttc	45360
tctcggttaa	aactctaagg	agatgcggat	taactacttg	aaattctcca	gacaatactc	45420
tccgagtgta	aatattactg	gtatacgggt	ccaccgactc	attatttccc	aaaatttgag	45480
cagttgatgc	agtcggcata	ggtgccacca	ataaactatt	tctaagaccg	tatgttctga	45540
ttttatcttt	tagaggttcc	caattccaaa	gatccgacgg	tacaacattc	caaagatcat	45600
attgtagaat	accgttactg	gcgtacgatc	ctacatattg	atcgtagggt	ccttccttct	45660
cagctagttc	acaactcgcc	tctaataaac	cgtaataaat	ggtttcgaag	atcttcttat	45720
ttagatcttg	tgcttccagg	ctatcaaatg	gataatttaa	gagaataaac	gcgtccgcta	45780
atccttgaac	accaataacc	ataggtctat	gtctcttatt	agagatttca	gcttctggaa	45840
taggataata	attaatatct	ataattttat	tgagatttct	gacaattact	ttgaccacat	45900
ccttcagttt	gagaaaatca	aatcgcccat	ctattacaaa	catgttcaag	gcaacagatg	45960
ccagattaca	aacggctacc	tcattagcat	ccgcatattg	tattatctca	gtgcaaagat	46020
tactacactt	gatagttcct	aaattttggt	gattactctt	tttgttacac	gcatccttat	46080
aaagaatgaa	tggagtacca	gtttcaatct	gagattctat	aatcgctttc	cagacgactc	46140
gagcctttat	tatagatttg	tatctccttt	ctctttcgta	tagtgataac	aatcgttcga	46200
actcgtctcc	ccaacattg	tccaatccag	gacattcctc	cggacacatc	aacgaccact	46260
ctcgtcctc	cttcaactgt	ttcataaaga	gatcaggaat	ccaaagagct	ataaatagat	46320
ctctggttct	atgttctctg	tttctgtgat	tctttttaag	atcgaggaac	gccataatat	46380
cagaatgcca	cggttccaag	tatatggcca	taactccagg	ccgtttgttt	cctccctgat	46440
ctatgtatct	agcgggtgta	ttataaactc	tcaacattgg	aataataccg	tttgatatac	46500
cattggtaacc	ggagatatag	cttccactgg	cacgaatatt	actaattgat	agacctattc	46560
cccctgcoat	tttagagatt	aatgcgcctc	gttttaacgt	gtcatagata	ccctctatgc	46620
tatcatcgat	catgttaagt	agaaaacagc	tagacatttg	gtgacgacta	gttcccgcct	46680
taataaagg	aggagaagcg	tgcgtaaac	atttttcaga	aagtagattg	tacgtctcaa	46740
tagctgagtc	tatatcccat	tgatgaattc	ctactgagac	acgcattaac	atgtgctgag	46800
gtctttcaac	gatctgtgtg	tttattttca	acaagtagga	tttttccaaa	gtttttaaac	46860
caaaatagtt	gtatgaaaag	tctcgttcgt	aaataataac	cgagttgagt	ttatccttat	46920
atgtgttaac	tatatccatg	tgataacttg	aaataatcgg	agaatgtttc	ccatttttag	46980
gattaacata	gttgaataaa	tcctccatca	cttcaactaa	tagttttttt	gtttccttgt	47040
gtagatttga	tacggctatt	ctggcgggta	gaatggcata	atccggatgt	tgtgtagtac	47100
aagtggtctc	tatttcggct	gccagagtgt	ccaattctac	cgttgttact	ccattatata	47160
ttccttgaat	aaccttcata	gctattttta	taggatctat	atgatccgtg	tttaagccat	47220
aacataattt	tctaatacga	gacgtgattt	tatcaaacat	gacattttcc	ttgtatccat	47280
ttcgtttaat	gacaaacatt	ttgttggtg	taataaaaaa	attatttaac	tttccattaa	47340

-continued

---

```

tagggatttg acgtacgtag cgtacaaaat gattgttctt ggtatataga taaagagtcc 47400
tatatatttg aaaatcgtta cggtctgatt aaactttaat gattgcatag tgaatatatc 47460
attaggattt aactccttga ctatcatggc ggcgccagaa attaccatca aaagcattaa 47520
tacagttatg ccgacgcag ttagaacggt tatagcatcc accatttata tctaaaaatt 47580
agatcaaaga atatgtgaca aagtcctagt tgtatactga gaattgacga aacaatgttt 47640
cttacaatatt tttttcttat tagtaactga cttaaatagta ggaactggaa aactagactt 47700
gattatttcta taagtataga tacccttcca aataaatatc tctttgataa aagttccaga 47760
aaatgtagaa ttttttaaaa agttatcttt tgctattacc aagattgtgt ttagacgctt 47820
attattaata tgagttagta aatccacacc gcctctagat atcgccttta tttccacatt 47880
agatggtaaa tccaatagtg aaactatctt tttaggaatg tatggactcg cgttttagagg 47940
agtgaacgtc ttaggcgtcg gaaaggatga ttcgtcaaac gaataaacia tttcacaat 48000
ggatgttaat gtatttagtag gaaatTTTTT gacgctagtg gaattgaaga ttctaagga 48060
tgatgttcta cctatttcat ccgataacat gttaatttcc gacaccaacg gttttaatat 48120
ttcgatgata tacggtagtc tctctttcgg acttatatag cttattccac aatcagagtc 48180
attatatact ccaaaaaaca aaataactag tataaaatct gtatcgaatg ggaaaaacga 48240
aattatcgac ataggtagat aatccggaac attgaacgta ttaatactta attcttttcc 48300
tgtggtaagt accgataggt tattgacatt gtatggtttt aaatattcta taacttgaga 48360
cttgatagat attagttagt aattgaaaat tatttttacc accacgtgtg tttcaggatc 48420
atcgtcgaag cccgtcaacc aaccgaatgg agtaaaataa atatcattaa tatatgctct 48480
agatattagt atttttatca atcctttgat tatcatcttc tcgtaggcga atgattccat 48540
gatcaagagt gatttaagaa catcctccgg agtattaatg ggcttagtaa acagtccatc 48600
gttgcaataa taaaagtat ccaagttaaa ggatattatg cattcgttta aagatatcac 48660
ctcatctgac ggagacaatt ttttgtagg ttttagagac tttgaagcta cttgtttaac 48720
aaagtatttc atcgtcgttt actattctat ttaattttgt agttaattta tcacatatca 48780
cattaattga ctttttggtc catttttcca tacgtttata ttcttttaat cctgcgttat 48840
ccgtttccgt tatatccagg gatagatctt gcaagttaaa tagaatgctc ttaaataatg 48900
tcattttctt atccgctaaa aatttaaaga atgtataaac ttttttcaaa gatttgaaac 48960
tcttaggtgg tgtcctagta cacaatatca taaacaaact aataaacatt ccacattcag 49020
attccaacag ctgattaact tccacattaa tacagcctat tttcgtcca aatgtacatt 49080
cgaaaaatct gaataaaaca tcaatgtcgc aatttgatt atccaatca gaatgtttgt 49140
gattcgtggt aaaaccatcg gagaaggat agaaataaaa attattatag tgggtggaatt 49200
cagttggaat attgcctccg gagtcataaa aggatactaa acattgtttt ttatcataaa 49260
ttacacattt ccaatgagac aaataacaaa atccaaacat tacaatcta gaggtagaac 49320
ttttaatttt gtctttaagt atatacgata agatagtttt attcataaac gcgtcaaatt 49380
tttcatgaat cgctaaggag ttaagaatc tcatgtcaaa ttgtcctata taatccactt 49440
cggatccata agcaaactga gagactaagt tcttaatact tcgattgctc atccaggctc 49500
ctctctcagg ctctattttc atcttgacga cctttggatt ttcaccagta tgtattcctt 49560
tacgtgataa atcatcgatt tcaaatcca tttgtgagaa gtctatcgcc ttagatactt 49620
tttccgtag tcgaggttta aaaaaatacg ctaacggtat actagtaggt aactcaaaga 49680

```

-continued

---

catcatatat agaatggtaa cgcgctcttta actcgtccgt taactctttc tttgatcga 49740  
gttcgtcgct actattgggt ctgctcaggt gccccgactc tactagttcc aacatcatac 49800  
cgataggaat acaagacact ttgccggcgg ttgtagattt atcatatttt tccactacat 49860  
atccgttaca atttgttaaa aatttagata catctatatt gctacataat ccagctagtg 49920  
aatatataatg acataataaa ttggtaaatc ctagtctcgg tattttacta attactaaat 49980  
ctgtatatct ttccatttat catggaaaag aatttaccag atatctctt ttttccaaac 50040  
tgcgttaatg tattctctta caaatattca caagatgaat tcagtaatat gagtaaaacg 50100  
gaacgtgata gtttctcatt gcccggtggtt ccagttataa aacatagatg gcataacgca 50160  
cacgttgtaa aacataaagg aatatacaaa gttagtacag aagcacgtgg aaaaaagta 50220  
tctcctccat cactagggaa acccgcacac ataaacctaa ccgcgaagca atatatatac 50280  
agtgaacaca caataagctt tgaatgttat agttttctaa aatgtataac aaatacagaa 50340  
atcaattcgt tcgatgagta tatattaaga ggactattag aagctggtaa tagtttacag 50400  
atattttcca attccgtagg taaacgaaca gatactatag gtgtactagg gaataagtat 50460  
ccatttagca aaattccatt gccctcatta actcctaaag cacaacgaga gatattttca 50520  
gcggtgattt ctcatagacc tgtagtttta actggaggaa ccggagtggg taagacgtca 50580  
caggtacca agttattgct ttggtttaat tatttatttg gtggattctc tactctagat 50640  
aaaatcactg actttcacga aagaccagtc attctatctc ttcctaggat agctttagtt 50700  
agattgcata gcaataccat tttaaaatca ttgggattta aggtactaga tggatctcct 50760  
atctctttac ggtacggatc tataccggaa gaattaataa acaacaacc aaaaaatat 50820  
ggaattgtat tttctacca taagttatct ctaacaaaac tatttagtta tggcactctt 50880  
attatagaag aagttcatga gcatgatcaa ataggagata ttattatagc agtagcgaga 50940  
aagcatcata cgaaaataga ttctatggtt ttaatgactg ccacgttaga ggatgacagg 51000  
gaacggctaa aagtattttt acctaatccc gcatttatac atattcctgg agatacactg 51060  
tttaaaatta gcgaggtatt tattcataat aagataaatc catcttcag aatggcatac 51120  
atagaagaag aaaagagaaa tttagttact gctatacaga tgtatactcc tcctgatgga 51180  
tcatccggtat tagtctttgt gccatccgtt gcacagtgtc acgaatataa atcatattta 51240  
gaaaaaagat taccgtaga tatgtatatt attcatggta aggtcttaga tatagacgaa 51300  
atattagaaa aagtgtattc atcaccta atgacgataa ttattctac tccttatttg 51360  
gaatccagcg ttactatacg caatgttaca cacatttatg atatgggtag agtttttgtc 51420  
cccgtcctt ttggaggatc gcaacaattt atttctaat ctatgagaga tcaacgaaaa 51480  
ggaagagtag gaagagttaa tcctggtaca tacgtctatt tctatgatct gtcttatatg 51540  
aagtctatac agcgaataga ttcagaattt ctacataatt atatattgta cgctaataag 51600  
tttaatctaa cactccccga agatttggtt ataatcccta caaatttggga tattctatgg 51660  
cgtacaaagg aatataataga ctcggtcgat attagtacag aaacatggaa taaattatta 51720  
tccaattatt atatgaagat gatagagtat gctaaacttt atgtactaag tcctattctc 51780  
gctgaggagt tggataactt tgagaggacg ggagaattaa ctagtattgt acgagaagcc 51840  
atcttatctc taaatttaca aattaagatt ttaaatttta aacataaaga tgatgatacg 51900  
tatatacact tttgtaaaat attattcgggt gtctataacg gaacaaacgc tactatatac 51960  
tatcatagac ctctaaccgg atatatgaat atgatttcag ataactatatt tgttcctgta 52020  
gataataact aaaaatcaaa ctctaatac cacatctttt tttagagatg aaaaattttc 52080

-continued

---

cacatctcct tttgtagaca cgactaaaca ttttgacagaa aaaagtttat tagtgtttag 52140  
ataatcgtat acttcatcag tgtagatagt aaatgtgaac agataaaagg tattcttget 52200  
caatagattg gtaaatcca tagaataat taatccttcc ttcttgagat cccacatcat 52260  
ttcaaccaga gacgttttat ccaatgattt acctcgact ataccacata caaaactaga 52320  
ttttgcagtg acgtcgtacc tggatttctt accaaacaaa attttacttt tagttctttt 52380  
agaaaattct aaggtagaat ctctatttgc caatatgtca tctatggaat taccactagc 52440  
aaaaaatgat agaaatata attgatacat cgcagctggt tttgatctac tatactttaa 52500  
aaacgaatca gattccataa ttgcctgat atcatcagct gaaaaactat gttttacacg 52560  
tattccttcg gcatttcttt ttaatgatat atcttgttta gacaatgata aagttatcat 52620  
gtccatgaga gacgcgtctc cgtatcgtat aaatatttca ttagatgta gacgcttcat 52680  
taggggtata cttctataag gtttcttaat cagtccatca ttggttgcgt caagaactac 52740  
tatcggatgt tgttgggtat ctctagtgtt acacatggcc ttactaaagt ttgggtaaat 52800  
aactatgata tctctattaa ttatagatgc atataattca ttcgtcaagg atattagat 52860  
cgacttgcta tcgctattaa tacgtgtaat gtaatcatat aaatcatgcg atagccaagg 52920  
aaaattcaaa tagatgttca tcatataatc gtcgctataa ttcataattaa tacggtgaca 52980  
ttgactaatt tgtaatatag cctcgccacg aagaaagctc tcgtattcag tttcatcgat 53040  
aaaggatacc gttaaatata actggttgc gatagtctca tagtctatta agtggttaagt 53100  
ttcgtacaaa tacagaatcc ctaaaatatt atctaagtgt ggattaatct ttaccataac 53160  
tgtataaaat ggagacggag tcataactat tttaccgttt gtacttactg gaatagatga 53220  
aggaataatc tccggacatg ctggtaaaga cccaaatgct tgtttgaaga aatccaatgt 53280  
tccaggctct aatctcttaa caaaaattac gatattcgat cccgatatcc tttgcattct 53340  
atttaccagc atatcacgaa ctatattaag attatctatc atgtctatc tcccaccggt 53400  
atataaatcg cctccgctaa gaaacgtag tatatccata caatggaata cttoatttct 53460  
aaaatagtat tcgttttcta attctttaat gtgaaatcgt atactagaaa gggaaaaatt 53520  
atctttgagt tttccgttag aaaagaacca cgaaactaat gttctgattg cgtccgatc 53580  
cgttgctgaa ttaatggatt tacaccaaaa actcatataa cttctagatg tagaagcatt 53640  
cgctaaaaaa ttagtagaat caaaggatat aagtagatgt tccaacaagt gagcaattcc 53700  
caagatttca tctatcatc tctcgaatcc gaaattagaa attccaagt agatatectt 53760  
tttcatccga tcgttgatga aaatacgaac tttattcggg aagacaatca tttactaagg 53820  
agtaaaatag gaagtaatgt tcgtatgtcg ttatcatcgt ataaattaaa ggtgtgtttt 53880  
ttaccattaa gtgacattat aattttacca atattggaat tataatatag gtgtatttgc 53940  
gcactcgcga cggttgatgc atcggtaaat atagctgat ctaatgttct agtcggtatt 54000  
tcatcatttc gctgtctaat aatagcgttt tctctatctg tttccattac agctgcctga 54060  
agtttattgg tcggataata tgtaaaataa taagaaatc atacgaataa caaaaataaa 54120  
ataagatata ataagatgc catttagaga tctaattttg ttcaacttgt ccaaattcct 54180  
acttacagaa gatgaggaat cgttgagat agtgccttcc ttatgtagag gatttgaat 54240  
atcttataat gacttgataa cttactttcc agataggaat taccataat atatttataa 54300  
agtatttgaa catgtagatt tatcggagga attaagtag gaattccatg atacaactct 54360  
gagagattta gtctatctta gattgtacaa gtattccaag tgtatacggc cgtgttataa 54420

-continued

---

```

attaggagat aatctaaaag gcatagttgt tataaaggac aggaatattt atattagga 54480
agcaaatgat gacttgatag aatatctcct caaggaatac actcctcaga tttatacata 54540
ttctaagttag cgcgtcccca taactgggtc aaaattaatt ctttggtgat tttctcaagt 54600
tacatttatg gcgtatacaa cgtcgcatac aacaacaaat aaaaaggtag atgttctcgt 54660
ttccaaaaaa tgtatagatg aactagtcga tccaataaat tatcaaatc tccaaaattt 54720
atgtgataaa ggaagcggaa caataacaa aatactcagg aagatatttt attcggtaac 54780
aggtggccaa actccatagg tagctttttc tatttcggat tttagaattt ccaaattcac 54840
cagcgattta tcggttttgg tgaatccaa ggatttatta atgtcccaa atgccatttg 54900
ttttgtctgt ggattgtatt tgaatggga aacgatgtag ttagatagat gcgctgcaa 54960
gtttcctatt agggttccgc gcttcacgtc acccagcata cttgaatcac catcctttaa 55020
aaaaaatgat aagatatcaa catggagtat atcatactcg gattttaatt cttctactgc 55080
atcaactgaca ttttcacaaa tactacaata cggtttacgc aaaataatca gtacgttctt 55140
catttatggg tatcaaaaac ttaaatcgt tactgctgga aaataaatca ctgacgatat 55200
tagatgataa tttatacaaa gtatacaatg gaatatttgt ggatacaatg agtatttata 55260
tagccgtcgc caattgtgtc agaaacttag aagagttaac tacggatttc ataaaatcgc 55320
taaacggatg ggtaaaaaag ggagggcatg taaccctttt tatcgataga ggaagtataa 55380
aaattaaaca agacgttaga gacaagagac gtaaatattc taaattaacc aaggacagaa 55440
aatgcttaga attagaaaag tgtacatccg aaatacaaaa tggttaccgga tttatggaag 55500
aagaataaaa ggcagaaaatg caatataaaa tcgataaaact cacatttcaa atatatttat 55560
ctgattctga taacataaaa atatcattga atgagatact aacacatttc aacaataatg 55620
agaatgttac attattttat tgtgatgaac gagacgcaga attcgttatg tgtctcaggg 55680
ctaaaacaca tttctctacc acaggagaat ggccgttgat aataagtacc gatcaggata 55740
ctatgctatt tgcactctgt gataatcctc ctaagatgat aaaaaacta actcaactgt 55800
ttaaatatgt tccatctgca gaggataact atttagcaaa attaacggcg ttagtgaatg 55860
gatgtgattt ctttctgga ctctatgggg catctataac acccaccac ttaacaaaa 55920
tacaattggt tagtgatttt acaatcgata atatagtcac tagtttgga attaaaaatt 55980
attatagaaa gactaactct accgtagacg tgcgtaatat tggtagcttt ataaacgatt 56040
acgctaattt agacgatgtc tactcgtata ttcctccttg tcaatgcact gttcaagaat 56100
ttatattttc cgcattagat gaaaaatgga atgaatttaa atcatcttat ttagagaccg 56160
ttccgttacc ctgccaatta atgtacgcgt tagaaccacg taaggagatt gatgtttcag 56220
aagttaaaac tttatcatct tatatagatt tcgaaaatac taaatcagat atcgatgta 56280
taaaatctat atcctcgcac ttcggatatt ctaacgaaaa ctgtaacacg atagtattcg 56340
gcatctataa ggataattta ctactgagta taaatagttc attttacttt aacgatagtc 56400
tgtaataaac caatactaaa agtgataata taataaatat aggttactag attaaaaatg 56460
gtgttccaac tcgtgtgctc tacgtcggc aaagatattt ctacgaacg atataaattg 56520
attatacgaa aaaaatcatt aaaggatgta ctctcagtg taaagaacga atgttgtagg 56580
ttaaaattat ctacacaaat agaacctcaa cgtaacttaa cagtgaacc tctattggat 56640
ataaactaat atggatccg ttaattttat caagacatat gcgcctagag gttctattat 56700
ttttattaat tataccatgt cattaacaag tcatttgaat ccatcgatag aaaaacatgt 56760
gggtatttat tatggtaoct tattatcgga acacttggtg gttgaatcaa catatagaaa 56820

```

-continued

---

aggagttcga atagteccat tggatagttt ttttgaagga tatcttagtg caaaagtata 56880  
 catgttagag aatattcaag ttatgaaaat agcagctgat acgtcattaa ctttattggg 56940  
 tattccgtat ggatttggtc atgatagaat gtattgtttt aaattggtag ctgactgtta 57000  
 taaaaatgcc ggtgttgaaa catcgtctaa acgaatatta ggtaaagata tttttctgag 57060  
 ccaaaacttc acagacgata atagatggat aaagatatat gattctaata atttaacatt 57120  
 ttggcaaatt gattacotta aagggtgagt taatatgcat aactactcct ccgttgtttt 57180  
 ttccctcggt ctttttctta acgttgtttg ccatcactct cataatgtaa agatattcta 57240  
 aaatggtaaa cttttgcata tcggacgcag aaattggat aaatgttgta attgtattat 57300  
 ttcccgtcaa tggactagtc acagctccat cagttttata tccttagag tatttctcac 57360  
 tcgtgtctag cattctagag cattccatga tctgtttatc gttgatattg gccggaaaga 57420  
 tagatttttt attttttatt atattactat tggcaattgt agatataact tctggtaaat 57480  
 atttttctac cttttcaatc tcttctatct tcaagccggc tatatattct gctatattgt 57540  
 tgctagtatc aatacctttt ctggctaaga agtcatatgt ggtattcact atacagttt 57600  
 taactggtag ttccattagc ctttccactt ctgcagaata atcagaaatt ggttctttac 57660  
 cagaaaatcc agctactata ataggctcac cgatgatcat tggcaaaatc ctatattgta 57720  
 ccagattaat gagagcatat ttcatttcca ataattctgc tagttcttga gacattgatt 57780  
 tatttgatga atctagtgg ttctctagat actctacat ttctgccgca tacaataact 57840  
 tgtagataa aatcagggtt atcaaagtgt ttagcgtggc tagaatagtg ggcttgcattg 57900  
 tattaagaa tgccgttagta tgagtaaac gttttaacga attatagtg ctccagaaat 57960  
 ctgtggcggt acatacatga gccgaatgac atcgaagatt gtccaatatt ttaataagct 58020  
 gctctttgtc cattatttct atatttgact cgcaacaatt gtagatacca ttaatcaccg 58080  
 attccttttt cgatgctgga caatagcaca attgttttagc tttggactct atgtattcag 58140  
 aattaataga tatatctctt aatacagatt gcaactataca ttttgaaact atgtcaaaaa 58200  
 ttgtagaacg acgctgttct gcagccattt aactttaat aatttcaaaa aattttaaatt 58260  
 gagcatccgt ataaaaatcg ataaactgag ccaaattgtg gcatattttt cagagttcag 58320  
 tgaagaagta tctataaatg tagactogac ggatgagtta atgtatattt ttgccgctt 58380  
 gggcggatct gtaaacattt gggcaattat acctctaagt gcatcagtg tttaccgag 58440  
 agccgaaaac attgtgttta atcttccggt gtccaaggta aaatcgtgtt tgtgtagttt 58500  
 tcacaatgat gccatcatag atatagaacc tgatctggaa aataatctag taaaactttc 58560  
 tagttatcat gtagtaagtg tcgattgtaa caaggaactg atgcctatta ggacagatac 58620  
 tactatttgt ctaagtatag atcaaaagaa atcttactgt ttttaatttc acaagtatga 58680  
 agaaaaatgt tgtggtagaa ccgtcattca tctagaatgg ttgttgggct ttatcaagt 58740  
 tattagtcag catcagcatt tggctattat gtttaaagat gacaatatta ttatgaagac 58800  
 tcctggtaat actgatgcat tttccaggga atattctatg actgaatgtt ctcaagaact 58860  
 acaaaagttt tctttcaaaa tagctatctc gtctctcaac aaactacgag gattcaaaaa 58920  
 gagagtcaat gtttttgaag ctagaatcgt aatggataat gacgataaca ttttaggaat 58980  
 gttgtttctg gatagagttc aatcctttaa gatcaacatc tttatggcgt ttttagatta 59040  
 atactttcaa tgagataaat atgggtagcg gagtaagtgt tgagctccct aaacgggatc 59100  
 cgcctccggg agtaccact gatgagatgt tattaacgt ggataaaatg catgacgtga 59160

-continued

---

```

tagctcccgc taagctttta gaatatgtgc atataggacc actagcaaaa gataaagagg 59220
ataaagtaaa gaaaagatat ccagagttta gattagtcaa cacaggaccc ggtggtcttt 59280
cagcattggt aagacaatcg tataatggaa ccgcacccaa ttgctgtcgc acttttaate 59340
gtactcatta ttggaagaag gatggaaga tatcagataa gtatgaagag ggtgcagtat 59400
tagaatcgtg ttggccagac gtccacgaca ctggaaaatg cgatggtgat ttattcgact 59460
ggtgtcaggg ggatacgttc gatagaaaca tatgccatca gtggatcggg tcagccttta 59520
ataggagtaa tagaactgta gagggccaac aatcgttaat aaatctgtat aataagatgc 59580
aaacattatg tagtaaagat gctagtgtac caatatgcga atcatttttg cattatttac 59640
gcgcacacaa tacagaagat agcaaagaga tgategatta tattctaaga caacagtctg 59700
cggactttaa acagaaatat atgagatgta gttatcccac tagagataag ttagaagagt 59760
cattaaaata tgcggaacct cgagaatgtt gggatccaga gtgttcgaat gccaatgta 59820
atctcttact aacacgtaat tataataatt taggactttg caatattgta cgatgtaata 59880
ctagcgtgaa caacttacag atggataaaa ctctctcatt aagattgtca tgtggattaa 59940
gcaatagtga tagatcttct actgttcccg tcaatagagc aaaagtagtt caacataata 60000
ttaaacactc gttcgaccta aaattgcatt tgatecagttt attatctctc ttggtaatat 60060
ggatacctaa tgtagctatt taaatgggtg ccgcggaag catacagacg acggtgaata 60120
cactcagcga acgtatctcg tctaaattag aacaagaagc gaacgctagt gctcaacaa 60180
aatgtgatat agaaatcgga aatttttata tccgacaaaa ccatggatgt aacctcactg 60240
ttaaaaatat gtgctctcgc gacgcggatg ctacagttgga tgctgtgta tcagccgcta 60300
cagaaacata tagtggatta acaccggaac aaaaagcata cgtgccagct atgtttactg 60360
ctgctgtaaa cattcagacg agtghtaaca ctggtgtag agattttgaa aattatgtga 60420
aacagacttg taattctagc gcggctcgtc ataacaaatt aaagatacaa aacgtaatca 60480
tagatgaatg ttacggagcc ccaggatctc caacaaattt ggaatttatt aatacaggat 60540
ctagcaaagg aaattgtgcc attaaagcgt tgatecaatt gacgactaag gccactactc 60600
aaatagcacc tagacaagtt gctggtacag gagttcagtt ttatatgatt gttatcgggtg 60660
ttataatatt ggcagcgttg tttatgtact atgccaagcg tatgctgttc acatccacca 60720
atgataaaat caaacttatt tttagccaata aggaaaacgt ccattggact acttacatgg 60780
acacattctt tagaacttct ccgatggta ttgctaccac ggatagcaa aactgaaat 60840
atattgataa tattttaata gattaacatg gaagtatcgc ctgatcgtct agacgatata 60900
gtgaaacaaa atatagcggg tgaaaaattt gtagattttg ttatacacgg tctagagcat 60960
caatgtcctg ctatacttcg accattaatt aggttggtta ttgatatact attattgtt 61020
atagtaattt atatttttac ggtacgtcta gtaagtagaa attatcaat gttggtggcg 61080
ttggtggcgc tagtcatcac attaactatt ttttattact ttatactata atagtactag 61140
actgacttct aacaaacatc tcacctgcca taaataaatg cttgatatta aagtcttcta 61200
tttctaacac tattccatct gtggaaaata atactctgac attatcgcta attgacacat 61260
cggtgagtga tatgcctata aagtaataat ctcttttggg cacatatacc agtggtaccag 61320
gttctaacaa cctatttact ggtgctcctg tagcatactt tttctttacc ttgagaatat 61380
ccatcgtttg cttggtaaat agcगतatgt gattttttat caaccactcg aaaaagtaat 61440
tggagtgttc atacctcta cgggctattg tctcatggcc gtgatgaaa ttttaagtaac 61500
acgactgtgg tagatgttct ctatagagcc ggttgccgca aatagataga actaccaata 61560

```

-continued

---

tgtctgtaca	aatgttaaac	attaattgat	taacagaaaa	aacaatgttt	gttctgggaa	61620
tagaaaccag	atcaaaaaca	aattcgttag	aatatatgcc	acgtttatac	atggaatata	61680
aaataactac	agtttgaaaa	ataacagtat	catttaaaca	tttaacttgc	ggggtaatt	61740
tcacaacttt	actgtttttg	aactgttcaa	aatatagcat	agatccgtga	gaaatacgtt	61800
tagccgcctt	taatagagga	aatcccaccg	cctttctgga	tctcaccaac	gacgatagtt	61860
ctgaccagca	actcatttct	tcacatcca	cctgttttaa	catataatag	gcaggagata	61920
gataaccgtc	attgcaatat	tccttctcgt	aggcacacaa	tctaatttgg	ataaaatctc	61980
cattctcttc	tctgcattta	ttatcttgtt	tcgggtggctg	attaggtctg	agtcttggtt	62040
taggctttgg	tatatcgttg	ttgaatctat	tttggtcatt	aaatctttca	tttcttctctg	62100
gtataatfff	atcacctcgt	ttggttggat	ttttgtctat	attatcgttt	gtaacatcgg	62160
tacgggtatt	catttatcac	aaaaaaaaact	tctctaaatg	agtctactgc	tagaaaacct	62220
catcgaagaa	gataccatat	tttttgcagg	aagtatatct	gagtatgatg	atttcaaaat	62280
ggttattgcc	ggcgcaaaat	ccaaatttcc	aagatctatg	ctttctattt	ttaatatagt	62340
acctagaacg	atgtcaaaat	atgagttgga	gttgattcat	aacgaaaata	tcacaggagc	62400
aatgtttacc	acaatgtata	atataagaaa	caatttgggt	ctaggagatg	ataaaactaac	62460
tattgaagcc	attgaaaact	atttcttgga	tcctaaacaat	gaagttatgc	ctcttattat	62520
taataatac	gatatgactg	ccgtcattcc	taaaaaagt	ggtaggagaa	agaataagaa	62580
catggttatc	ttccgtcaag	gatcatcacc	tatcttctgc	attttcgaaa	ctcgtaaaaa	62640
gattaatatt	tataaagaaa	atatggaatc	cgcgtcgaact	gagtatacac	ctatcggaga	62700
caacaaggct	ttgatatcta	aatatgoggg	aattaatgtc	ctgaatgtgt	attctccttc	62760
cacatccata	agattgaaatg	ccatttacgg	atccaccaat	aaaaataaac	tagagaaact	62820
tagtactaat	aaggaactag	aatcgtatag	ttctagccct	cttcaagaac	ccattaggtt	62880
aaatgatttt	ctgggactat	tggaaatgtg	taaaaagaat	attcctctaa	cagatattcc	62940
gacaaaggat	tgattactat	aaatggagaa	tgttccta	gtatacttta	atcctgtgtt	63000
tatagagccc	acgtttaaac	attcctttatt	aagtgtttat	aaacacagat	taatagtttt	63060
atftgaagta	ttcgttgtat	tcattcta	atatgtatft	tttagatctg	aattaaatat	63120
gttcttcatg	cctaaacgaa	aaatacccga	tcctattgat	agattacgac	gtgctaactc	63180
agcgtgtgaa	gacgataaat	taatgatcta	tggattacca	tggatgacaa	ctcaaacatc	63240
tgcgttatca	ataaatagta	aaccgatgtg	tataaagatt	gtgcaaagct	tttgcgatca	63300
ataaatggat	cacaaccagt	atcctttaac	gatgttcttc	gcagatgatg	attcattttt	63360
taagtatttg	gctagtcaag	atgatgaatc	ttcattatct	gatataattg	aaatcactca	63420
atatctagac	tttctgttat	tattattgat	ccaatcaaaa	aataaattag	aagccgtggg	63480
tcattgttat	gaatctcttt	cagaggaata	cagacaattg	acaaaattca	cagactctca	63540
agattttaaa	aaactgttta	acaaggtccc	tattgttaca	gatggaaggg	tcaaaacttaa	63600
taaaaggat	ttgttcgact	ttgtgattag	tttgatgcga	ttcaaaaaag	aatcctctct	63660
agctaccacc	gcaatagatc	ctattagata	catagatcct	cgctcgtgata	tcgcatftttc	63720
taacgtgatg	gatataftaa	agtcgaataa	agtgacaat	aattaattct	ttattgtcat	63780
catgaacggc	ggacatattc	agttgataat	cggcccatg	ttttcaggta	aaagtacaga	63840
attaattaga	cgagttagac	gftatcaaat	agctcaatat	aaatgcgtga	ctataaaata	63900

-continued

---

```

ttctaacgat aatagat acg gaacgggact atggacgcat gataagaata attttgaagc 63960
attggaagca actaaactat gcgatgtctt ggaatcaatt acagatttct ccgtgatag 64020
tatcgatgaa ggacagtctt ttccagacat tgttgaattc tgtgagcgta tggcaaacga 64080
aggaaaaata gttatagtag ccgcactcga tgggacattt caacgtaaac cgtttaataa 64140
tattttgaat cttattccat tatctgaaat ggtggtaaaa ctaactgctg tgtgatgaa 64200
atgctttaag gaggcttctt ttctaaacg attgggtgag gaaaccgaga tagaaataat 64260
aggaggtaat gatatgtatc aatcgggtg tagaaagtgt tacatcgact cataatatta 64320
tattttttat ctaaaaaact aaaaataaac attgattaaa ttttaatata atacttaaaa 64380
atggatgttg tgcggttaga taaaccgttt atgtattttg aggaaattga taatgagtta 64440
gattacgaac cagaaagtgc aatgaggtc gcaaaaaaac taccgatca aggacagtta 64500
aaactattac taggagaatt attttttctt agtaagttac agcgacacgg tatattagat 64560
ggtgccaccg tagtgtatat aggatcggct cctggtacac atatacgtta tttgagagat 64620
catttctata attaggagt gatcatcaaa tggatgctaa ttgacggccg ccatcatgat 64680
cctattctaa atggattgct ttagtggact ctagtgactc ggttcgttga tgaggaatat 64740
ctacgatcca tcaaaaaaca actgcactct tctaagatta ttttaatttc tgatgtgaga 64800
tccaaacgag gaggaaatga acctagtacg gcgatttac taagtaatta cgctctacaa 64860
aatgtcatga ttagtatttt aaacccctg gcgtctagtc ttaaatggag atgcccttt 64920
ccagatcaat ggcacaagga cttttatata ccacacggta ataaaatgtt acaacctttt 64980
gctccttcat attcagctga aatgagatta ttaagtattt ataccgtgga gaacatgaga 65040
ctgactcgag ttaccaaatt agacgctgta aattatgaaa aaaagatgta ctacctaat 65100
aagatcgtcc gtaacaaagt agttgttaac tttgattatc ctaatcagga atatgactat 65160
tttcacatgt actttatgct gaggaccgtg tactgcaata aaacatttcc tactactaaa 65220
gcaaaggtag tatttctaca acaactata tttcgtttct taaatattcc aacaacatca 65280
actgaaaaag ttagtcatga accaatacaa cgtaaaaat ctagcaaaaa ttctatgtct 65340
aaaaacagaa atagcaagag atccgtacgc ggtaataaat agaaacgtac tactgagata 65400
tactaccgat atagagtata atgatttagt tactttaata accgttagac ataaaattga 65460
ttctatgaaa actgtgtttc aggtatttaa cgaatcatcc ataaattata ctccggttga 65520
tgatgattat ggagaaccaa tcattataac atcgtatctt caaaaaggtc ataacaagtt 65580
tcctgtaaat tttctataca tagatgtggt aatatctgac ttatttccta gctttgttag 65640
actagatact acagaaaacta atatagttaa tagtgtacta caaacagggtg atggtaaaaa 65700
gactcttctg cttcccaaaa tgtagagac ggaaatagtt gtcaagattc tctatcgccc 65760
taatatacca ttaaaaattg ttagattttt ccgcaataac atggtaactg gagtagagat 65820
agccgataga tctgttattt cagtcgctga ttaatcaatt agtagagatg agataagaac 65880
attataataa tcaataatat atcttatatc ttatatcttg tttagaaaa tgctaattt 65940
aaaaatagcta acgctagtaa tccaatcgga agccatttga tatctataat agggatctca 66000
atctcctgat ttaaatagcg gacagctata ttctcggtag ctactcgttt ggaatcacia 66060
acattattta catctaattt actatctgta atggaaacgt ttcccaatga aatggtaaaa 66120
tccgatacat tgcattttgt tatatttttt tttaaagagg ctggtaaaaa cgcactcgtt 66180
cgtttacatg gctcgtacca acaataatag ggtaaatctg tatctattcc tatccgtact 66240
atgcttttat caggataaat acatttcat cgtatctcgt ctttgttagc atcacagaat 66300

```

-continued

---

gcataaattt gttcgtcogt catgataaaa atttaaagtg taaatataac tattattttt 66360  
atagttgtaa taaaaagga aatttgattg tatactttcg gttctttaa agaaactgac 66420  
ttgataaaaa tggctgtaat ctctaagggt acgtatagtc tatatgatca aaaagagatt 66480  
aatgctacag atattatcat tagtcatggt aaaaatgacg acgatatcgg taccgttaaa 66540  
gatggtagac taggtgctat gtaggggca ttatgtaaga cttgtggaa aacggaattg 66600  
gaatgtttcg gtcactggg taaagtaagt atttataaaa ctcatatagt taagcctgaa 66660  
tttatttcag aaattattcg tttactgaat catatatgta ttcactgogg attattgctg 66720  
tcacgagaac cgtattccga cgatattaac ctaaaagagt taccgggaca cgctcttagg 66780  
agattaaagg ataaaatatt atccaagaaa aagtcattgt ggaacagcga atgtatgcaa 66840  
ccgtatcaaa aaattacttt ttcaaagaaa aaggtttggt tcgtcaaaa gttggatgat 66900  
attaacgttc ctaattctct catctatcaa aagttaattt ctattcatga aaagttttg 66960  
ccattattag aaattcatca ataccagct aacttatttt atacagacta ctttcccatc 67020  
cctccgctga ttattagacc ggtattaggt ttttggatag atagtatacc caaagagacc 67080  
aatgaattaa cttacttatt aggtatgatc gttaagaatt gtaacttgaa tgctgatgaa 67140  
caggttatcc agaaggcgg aatagaatac gatgatatta aaattatttc taataacact 67200  
accagtatca atttatcata tattacatcc ggcaaaaata atatgattag aagttatate 67260  
gtcggccggc gaaaagatca gaccgctaga tctgtaattg gtcccagtac atctatcacc 67320  
gttaatgagg taggaatgcc cgcataatatt agaaatacac ttacagaaaa gatatttggt 67380  
aatgccttta cagtgataa agttaaaca ctattagcgt caaaccaagt taaattttac 67440  
tttaataaac gattaacca attaacaaga ataccgcaag gaaagtttat taaaataaa 67500  
atacatttat tgcttggtga ttgggtagaa gtagctgttc aagaatatac aagtattatt 67560  
tttgaagac agccgtctct acatagatac aacgtcatcg cttcatctat cagagctacc 67620  
gaaggagata ctatcaaat atctccgga attgctaact ctcaaatgc tgatttcgac 67680  
gggatgagg aatggatgat attagaacaa aatcctaaag ctgtaattga acaaagtatt 67740  
cttatgtatc cgcagcgtt actcaaacac gatattcatg gagccctgt ttatggatct 67800  
attcaagatg aatcgtagc agcgtattca ttgttagga tacaagatct ttgtttagat 67860  
gaagtattga acatcttggg gaaatatgga agagagttcg atcctaaagg taaatgtaa 67920  
ttcagcggta aagatatcta tacttacttg ataggtgaaa agattaatta tccgggtctc 67980  
ttaaaggatg gtgaaattat tgcaaacgac gtagatagta atttgtgtg ggctatgagg 68040  
catctgcatc tggctggact cttatccgat cataagtcca acgtggaagg tatcaacttt 68100  
attatcaagt catcttatgt ttttaagaga tatctatcta tttacggttt tggggtgaca 68160  
ttcaagatc tgagaccaa ttcgacgttc actaataaat tggaggccat caacgtagaa 68220  
aaaatagaac ttatcaaga agcatacgcc aaatatctca acgatgtaag agacgggaaa 68280  
atagttccat tatctaaagc tttagaggcg gactatgtgg aatccatggt atccaacttg 68340  
acaaatctta atatccgaga gatagaagaa catatgagac aaacgctgat agatgatcca 68400  
gataataacc tcctgaaat ggccaaagcg ggttataaag taaatcccac agaactaatg 68460  
tatattctag gtacttatgg acaacagagg attgatggtg aaccagcaga gactcgagta 68520  
tgggtagag ttttacctta ctatcttcca gactctaagg atccagaagg aagaggttac 68580  
attcttaatt ctttaacaaa aggattaacg ggttctcaat attacttttc gatgctggtt 68640

-continued

---

```

gccagatctc aatctactga tatcgtctgt gaaacatcac gtaccggaac actggctaga 68700
aaaatcatta aaaagatgga ggatatggtg gtcgacggat acggacaagt agttataggt 68760
aatacgtcca tcaagtaagc cgccaattat accaaaaattc taggctcagt atgtaaacct 68820
gtagatctta tctatccaga tgagtccatg acttggtatt tggaaattag tgctctgtgg 68880
aataaaataa aacagggatt cgtttactct cagaaacaga aacttgcaaa gaagacattg 68940
gcgccgttta atttcctagt attcgtcaaa cccaccactg aggataatgc tattaaggtt 69000
aaggatctgt acgatatgat tcataacgtc attgatgatg tgagagagaa atacttcttt 69060
acggtatcta atagatattt tatggagtat atattcttga cgcatcttaa tccttctaga 69120
attagaatta caaaagaaac ggctatcact atctttgaaa agttctatga aaaactcaat 69180
tatactctag gtggtggaac tcctattgga attatttctg cacaggtatt gtctgagaag 69240
tttacacaac aagccctgtc cagttttcac actactgaaa aaagtgggtc cgtaaacaaa 69300
aaacttggtt tcaacgagtt taataacttg actaatttga gtaagaataa gaccgaaatt 69360
atcactctgg tatccgatga tatctctaaa cttcaactctg ttaagattaa tttcgaattt 69420
gtatgtttgg gagaatataa tccaaacatc actcttcgaa aagaacacaga taggtatgta 69480
gtagatataa tagtcaatag attatacatc aagagagcag aaataaccga attagtcgtc 69540
gaatatatga ttgaacgatt catctccttt agcgtcattg taaaggaatg gggatggaa 69600
acattcattg aggatgagga taatattaga ttactgtct acctaaattt cgttgaaccg 69660
gaagaattga atcttagtaa gtttatgatg gttcttccgg gtgcccocaa caagggcaag 69720
attagtaaat tcaagattcc tatctttgac tatacgggat atgacgactt caatcaaaca 69780
aaaaagctca ataagatgac tgtagaactc atgaatctaa aagaattggg ttctttcgat 69840
ttggaaaaoc tcaacgtgta tcctggagta tggaaatacat acgatatctt cggtatcgag 69900
gccgctcgtg aatacttgtg cgaagccatg ttaaacacct atggagaagg gttcgattat 69960
ctgtatcagc cttgtgatct tctcgtagt ttactatgtg ctagttaaga accagaatca 70020
gtgaataaat tcaagttcgg cgcagctagt actcttaaga gagctacgtt cggagacaat 70080
aaagcattgt taaacgcggc tcttcataaa aagtcagaac ctattaacga taatagtagc 70140
tgccactttt ttgcaaggt ccctaataa tgaactggat attacaaata ctttatcgac 70200
ttgggtcttc tcatgagaat ggaaaggaaa ctatctgata agatatcttc tcaaaagatc 70260
aaggaaatgg aagaacacaga agacttttaa ttcttatcaa taacatattt ttctatgatc 70320
tgtcttttaa acgatggatt ttccacaaat gcgcctctca agtccctcat agaatgatac 70380
acgtataaaa aatatagcat aggcaatgac tccttatttt tagacattag atatgcaaaa 70440
atcatagccc cgcttctatt tactcccgca gcacaatgaa ccaacacggg ctcgtttcgt 70500
tgatcacatt tagataaaaa ggcggttacg tcgtcaaaat atttactaat atcggtagtt 70560
gtatcatcta ccaacggtat atgaataata ttaatattag agttaggtaa tgtatattta 70620
tccatcgcca aatttaaaac atatttgaac ttaacttcag atgatgggtc atccatagca 70680
tttttataat ttccaaata cacattattg gttactcttg tcattatagt gggagatttg 70740
gctttgtgca tatctccagt tgaacgtagt agtaagtatt tatacaaaact tttcttatcc 70800
atataaacg tacaaatgga taaaactact ttatcggtaa acgcgtgtaa tttagaatac 70860
gttagagaaa aggctatagt aggcgtacaa gcagccaaa catcaacact tatattcttt 70920
gttattatat tggcaattag tgcgctatta ctctggtttc agacgtctga taatccagtc 70980
tttaatgaat taacgagata tatgcgaatt aaaaatcgg ttaacgattg gaaatcatta 71040

```

-continued

---

```

acggatagca aaacaaaatt agaaagtgat agaggtaaac ttctagccgc tggttaaggat 71100
gatatattcg acttcaaatg tgtggatttc ggccgctatt ttatagctat gcgattggat 71160
aagaaaaacat atctgccgca agctatttagg cgaggtagctg gagacgcgtg gatgggttaa 71220
aaggcggcaa aggtcgatcc atctgctcaa caattttgtc agtatttgat aaaacacaag 71280
tctaataatg ttattacttg tggtaatgag atgtttaatg aattaggtta tagcggttat 71340
tttatgtcac cgcattgggtg ttccgatttt agtaatatgg aatagtgtta gataaatgcg 71400
gtaacgaatg ttctgtaag gaaccataac agcttagatt taacgtttaa gatgagcata 71460
aacataataa acaaaattac aatcaaacct ataacattaa tatcaacaaa tccaaaaaat 71520
gaaatcagtg gagtagtaaa cgcgtacata actcctggat aacgtttagc agctgccgtt 71580
cctattctag accaaaaatt cggtttcatg ttttcgaaac ggtattctgc aacaagtcca 71640
ggatcgtgtt ctacatattt ggcggcggtta tccagtatct gcctattgat cttcatttcg 71700
ttttcgattc tggctatttc aaaataaaat cccgatgata gacctccaga ctttataatt 71760
tcatctacga tgttcagcgc cgtagtaact ctaataatat aggctgataa gctaacatca 71820
tacctcctg tatatgtgaa tatggcatga tttttgtcca ttacaagctc ggttttaact 71880
ttattgcctg taataatttc tctcatctgt aggatatcta ttttttgc atgcattgcc 71940
ttcaagacgg gacgaagaaa cgtaatatcc tcaataacgt tategtttcc tacaataact 72000
acatatctca cctttttatt ttctaactca gtaaaaaaat tagaatccca tagggctaaa 72060
tgtctagcga tatttctttt cgtttctctc gtacacatag tgttacaaaa ccctgaaaag 72120
aagtgagtat acttgtcatc atttctaag tttctccag tccactgtat aaacgcataa 72180
tccttgtaat gatctggatc atccttgact accacaacat ttcttttttc tggcataact 72240
tcgttgtcct ttacatcatc gaacttctga tcattaatat gctcatgaac attaggaaat 72300
gtttctgatg gaggtctatc aataactggc acaacaataa caggagtttt caccgccgcc 72360
atthagttat tgaattaat catatacaac tctttaatac gagttatatt ttctgtatc 72420
cattgtttca catttacata tttcgacaaa aagatataaa atgcgtattc caatgcttct 72480
ctgtttaatg aattactaaa atatacaaac acgtcactgt ctggcaataa atgatatctt 72540
agaatattgt aacaatttat tttgtattgc acatgttcgt gatctatgag ttcttcttcg 72600
aatggcatag gatctccgaa tctgaaaaac tataaatagg agttagaata ataataattg 72660
agagtattgg taatatataa actccttagc ggtataatta gttttttct ctcaatttct 72720
atthttagat gtgatggaaa aatgactaat tttgtagcat tagtatcatg aactctaact 72780
aaaatcctaa tatcttcgtc acacgttagc tctttgaagt ttttaagaga tgcacagtt 72840
ggttctacag atggagttag tgaacaacatt tttgttcta cacatgtatg tactggagcc 72900
attgttttaa ctataatggt gcttgtatcg aaaaacttta atgcagatag cggaagctct 72960
tcgccgcgac tttctacgtc gtaattgggt tctaacgccg atctctgaat ggatactagt 73020
tttctaagtt ctaatgtgat tctctgaaaa tgtaaatcca attcctccgg cattatagat 73080
gtgtatacat cggtaaataa aactatagta tccaacgac ccttctcgca aattctagtc 73140
ttaaccacaaa aatcgatat aaccacggag atggcgatt taagagtgga ttcttctacc 73200
gttttgttct tggatgtcat ataggaaact ataaagtcgg cactactgtt aagaatgatt 73260
actaacgcaa ctatatagtt caaattaagc attttgaaa cataaaataa ctctgtagac 73320
gatacttgac tttcgaataa gtttcgagac aaacgaagaa agaacagacc tctcttaatt 73380

```

-continued

---

tcagaagaaa	actttttttc	gtattcctga	cgctctagagt	ttatatcaat	aagaaagtta	73440
agaattagtc	ggtaaatggt	gtatttcatt	acccaagttt	gagatttcat	aatattatca	73500
aaagacatga	taatattaaa	gataaagcgc	tgactatgaa	cgaaatagct	atatggttcg	73560
ctcaagaata	tagtcttggt	aaacgtggaa	acgataactg	tatttttaat	cacgtcagcg	73620
gcatctaata	taaatatagg	tatatattt	ccacacactc	tacaatatgc	cacaccatct	73680
tcataataaa	taaattcggt	agcaaaatta	ttaatttttag	tgaaatagtt	agcgtcaact	73740
ttcatagctt	ccttcaatct	aatttgatgc	tcacacgggtg	cgaattccac	tctaacaatcc	73800
cttttccatg	cctcaggttc	atcgatctct	ataatatcta	gttttttgcg	tttcacaaa	73860
acaggctcgt	ctctcgcgat	gagatctgta	tagtaactat	gtaaatgata	actagataga	73920
aagatgtagc	tatatagatg	acgatccttt	aagagaggtta	taataacttt	accccaatca	73980
gatagactgt	tgttatggtc	ttcggaaaaa	gaatttttat	aaatttttcc	agtattttcc	74040
aaatatacgt	acttaacatc	taaaaaatcc	ttaatgataa	taggaatgga	taatccgtct	74100
attttataaa	gaaatacata	tcgcacatta	tacttttttt	tggaatggg	aataccgatg	74160
tgtctacata	aatatgcaaa	gtctaaatat	tttttagaga	atcttagttg	gtccaaattc	74220
ttttccaagt	acggtaatag	atttttcata	ttgaacggta	tcttcttaat	ctctggttct	74280
agttccgcat	taaatgatga	aactaagtca	ctatttttat	aactaacgat	tacatcacct	74340
ctaaccatcat	catttaccag	aatactgatc	ttcttttgtc	gtaaatacat	gtctaagtgt	74400
ttaaaaaaa	gatcatacaa	ggtatacgtc	atctcatctg	tggtattctt	gtcattgaag	74460
gataaactcg	tactaatctc	ttctttaaca	gcctgttcaa	atztatatcc	tataacgaa	74520
aaaatagcaa	ccagtgtttg	atcatccgcg	tcaatattct	gttctatcgt	agtgtataac	74580
aatcgtatat	cttctctctg	gatagtcgat	acggtataaa	gggtgataac	gaaaatattt	74640
ttatttcgtg	aaataaagtc	atcgtaggat	tttgactta	tattcgcgct	tagtagatat	74700
gcttttattt	ttggaatgat	ctcaattaga	atagtctctt	tagagtcctt	ttaaagtta	74760
aaacaactag	gaaattgggt	tatgatgat	aattttttta	gtttttatag	attctttatt	74820
ctatacttaa	aaaatgaaaa	taaatacaaa	ggttcttgag	ggttgtgtta	aattgaaagc	74880
gagaaataat	cataaattat	ttcattatcg	cgatatccgt	taagtttgta	tcgtaaatggc	74940
gtggtcaatt	acaataaag	cggatactag	tagcttcaca	aagatggctg	aatcagagc	75000
tcacttaaaa	aatagcgtg	aaaataaaga	taaaaacgag	gatattttcc	cggaagatgt	75060
aataattcca	tctactaagc	ccaaaaccaa	acgagccact	actcctcgta	aaccagcggc	75120
tactaaaaga	tcaacaaaa	aggagggaag	ggaagaagaa	gtagttatag	aggaatatca	75180
tcaacaact	gaaaaaatt	ctccatctcc	tggagtcagc	gacattgtag	aaagcgtggc	75240
tgctgtagag	ctcgatgata	gcgacgggga	tgatgaacct	atggtacaag	ttgaagctgg	75300
taaagtaaat	catagtgcta	gaagcgatct	ctctgaccta	aaggtggcta	ccgacaatat	75360
cgtaaagat	cttaagaaaa	ttattactag	aatctctgca	gtatcgacgg	ttctagagga	75420
tgttcaagca	gctggatct	ctagacaatt	tacttctatg	actaaagcta	ttacaacact	75480
atctgatcta	gtcaccgagg	gaaaatctaa	agttgttctg	aaaaaagtta	aaacttgtaa	75540
gaagtaaatg	cgtgcacttt	tttataaaga	tggtaaactc	tttaccgata	ataatttttt	75600
aaatcctgta	tcagacgata	atccagcgta	tgaggttttg	caacatgtta	aaattctctac	75660
tcatttaaca	gatgtagtag	tatatgaaca	aacgtgggag	gaggcgttaa	ctagattaat	75720
ttttgtggga	agcgattcaa	aaggacgtag	acaatacttt	tacggaaaaa	tgcatgtaca	75780

-continued

---

gaatcgcaac gctaaaagag atcgtatddd tgtagagta tataacgtta tgaacgaat 75840  
 taattgtdtt ataaacaaaa atataaagaa atcgtccaca gattccaatt atcagttggc 75900  
 ggtdtttatg ttaatggaaa ctatgtdttt tattagattd ggtaaaatga aatatcttaa 75960  
 ggagaatgaa acagtagggd tattaacact aaaaaataaa cacatagaaa taagtccga 76020  
 tgaaatagtd atcaagtdtg taggaaagga caaagtdtca catgaattdg ttgttcataa 76080  
 gtctaataga ctatataaac cgtattdgaa actgacggat gattctagtc ccgaagaatt 76140  
 tctgttcaac aaactaagtg aacgaaaggt atacgaatg atcaaacagt ttggtattag 76200  
 aatcaaggat ctccgaacgt atggagtcaa ttatacgttd ttatataatt tttggacaaa 76260  
 tgtaaagtcc atactctctc ttcctgcacc aaaaaagtda atagcgttaa ctatcaaaaa 76320  
 aactgctgaa gtggtaggtc atactccatc aatttcaaaa agagcttata tggcaacgac 76380  
 tattttagaa atggtaaagg ataaaaattd tttagatgta gtatctaaaa ctacgttcga 76440  
 tgaattdcta tctatagtcg tagatcacgt taaatcatct acggatggat gatatagatc 76500  
 tttacacaaa taattacaag accgataaat ggaaatggat aagcgtatga aatctctcgc 76560  
 aatgacagct tctctcgag agctaaacac attagatatt atggcaatga taatgtctat 76620  
 attdaaacgc catcaaaaa ataccattdt ttcagtdgat aaggatggtc agtdttatgat 76680  
 tgattdcgaa tacgataatt ataaggcttc tcaatatttg gatctgacct tcaactccgat 76740  
 attdggagat gaatgcaaga ctcacgcac gagtatagcc gaacaattdg cgtgtgtgga 76800  
 tattatataa gaggatatta gcgaatataat caaaactact ccccgcttaaac aacgatttat 76860  
 aaaaaatac cgcaatagat cagatactcg catcagtcga gatacagaaa agcttaaaat 76920  
 agctctagct aaaggcatag attacgaata tataaaagac gcttgtdaat aagtaaatga 76980  
 aaaaaacta gtcgttdtata ataaaaacag atatggatgc caacgtatga tcatcttdta 77040  
 ctattdgcgac gtatatagac gcttdtagcga agaatgcttc agaattagaa cagaggttda 77100  
 ccgcatacga aataaataat gaattdgaa tagtattdt taagccgcca ttgattactt 77160  
 tgacaaatgt agtdaatatc tctacgattd aggaatcgtt tattcgattd accgttdacta 77220  
 ataaggaagg tgttdaaaat agaactaaga ttdcattatc taaggtacat ggtctagatg 77280  
 taaaaaatgt acagtdtagta gatgctatag ataacatagtd ttgggaaaag aatcattag 77340  
 tgacggaaaa tctctctcac aaagaatgct tgttdgagact atcgacagag gaacgctata 77400  
 tatttdttgga ttacaagaaa tatggtatct ctatccgact agaattagtc aatcttdttd 77460  
 aagcaaaaac aaaaaacttd acgatagact ttaagctaaa atatttdttda ggatccggtg 77520  
 cccagtdtaaac aagtdcttdta ttdcacgtda ttaatcatcc aaagtcaagg cctaatacat 77580  
 ctctggaaat agaattdcaca cctagagaca atgaaacagt tccatagat gaactaataa 77640  
 aggaattdgac gactctatca cgtcatatata ttdatggttdc tccagagaat gtaattdtdt 77700  
 ctccgcctat taacgcgct ataaaaacct ttdatgtdgca taaacaagat atagtdagtd 77760  
 tggatctgga aatctatata gccgtaacta agactgacgg cattdctata actatcagag 77820  
 ttacatcaaac cgggttdgtd tgttdattdta cacatcttdg ttatattatd agatatctg 77880  
 ttaagagaat aatagattdc gaagtdtagtd tcttdgtdga ggcagtdtaag gataagaact 77940  
 ggaccgtata tctcattdag ctatagagc ctgtdaatgc aatcaatgat agactagaag 78000  
 aaagtdagtd tgttdaatct aaactagtdg atatttdtga tccgatagtd ttdcaagtdaac 78060  
 agaaatacga agtdccgtdt actacaacta gtdaagtdcgt cgtatagtda tctacatatt 78120

-continued

---

taccaaagca	accagaaggt	gttattctgt	tctattcaaa	gggacctaaa	tctaaccattg	78180
atlttaaaat	taaaaaggaa	aatactatag	accaaactgc	aatgtagta	tttaggtaca	78240
tgtccagtga	accaattatc	tttgagaat	cgctctatctt	tgtagagtat	aagaaattta	78300
gcaacgataa	aggctttcct	aaagaatatg	gttctggtaa	gattgtgtta	tataacggcg	78360
ttaattatct	aaataatc	tattgtttgg	aatatattaa	tacacataat	gaagtgggta	78420
ttaagtccgt	ggttgtacct	attaagttaa	tagcagaatt	cttagttaat	ggagaaatac	78480
ttaaacctag	aattgataaa	accatgaaat	atattaactc	agaagattat	tatggaaatc	78540
aacataatat	catagtcgaa	catttaagag	atcaaagcat	caaaatagga	gatatactta	78600
acgaggataa	actatcggat	gtgggacatc	aatacgcmaa	taatgataaa	tttagattaa	78660
atccagaagt	tagttatctt	acgaataaac	gaactagagg	accgttggga	atlttatcaa	78720
actacgtcaa	gactcttctt	atltctatgt	attgttccaa	aacattttta	gacgattcca	78780
acaaacgaaa	ggatttggcg	attgattttg	gaaacgggtc	tgacctggaa	aaatactttt	78840
atggagagat	tgcgttattg	gtagcgcgg	atccggatgc	tgatgctata	gctagaggaa	78900
atgaaagata	caacaaatta	aactctggaa	ttaaaaccaa	gtactacaaa	tttgactaca	78960
ttcaggaaac	tattcgatec	gatatacttg	tctctagtgt	cagagaagta	ttttattttg	79020
gaaagttaa	tatcatcgac	tggcagtttg	ctatccatta	ttcttttcat	ccgagacatt	79080
atgctaccgt	catgaataac	ttatccgaac	taactgcttc	tggaggcaag	gtattaatca	79140
ctaccatgga	cgagacacaa	ttatcaaaat	taacagataa	aaagactttt	ataattcata	79200
agaatttacc	tagtagcgaa	aactatatgt	ctgtagaaaa	aatagctgat	gatagaatag	79260
tggatataaa	tccatcaaca	atgtctactc	caatgactga	atacattatc	aaaaagaacg	79320
atatagtcag	agtgtttaac	gaatacggat	ttgttcttgt	agataacggt	gatttcgcta	79380
caattataga	acgaagtaaa	aagtttatta	atggcgcctc	tacaatggaa	gatagaccgt	79440
ctacaaaaaa	ctttttcgaa	ctaaatagag	gagccattaa	atgtgaagg	ttagatgtcg	79500
aagacttact	tagttactat	gttgtttatg	tcttttctaa	gcggtaaata	ataatatggt	79560
atgggttctg	atatccccgt	tctaaatgca	ttaaataatt	ccaatagagc	gatttttgtt	79620
cctataggac	cttccaactg	tggatactct	gtattgttaa	tagatatatt	aatacttttg	79680
tccggtaaca	gaggttctac	gtcttctaaa	aataaaagt	ttataacatc	tggcctgttc	79740
ataaataaaa	acttggcgat	tctatatata	ctcttattat	caaatctagc	cattgtctta	79800
tagatgtgag	ctactgtagg	tgtaccattt	gattttcttt	ctaatactat	atatttctct	79860
cgaagaagtt	cttgccatc	atctgggaat	aaaatactac	tgttgagtaa	atcagttatt	79920
ttttttatat	cgatattgat	ggacattttt	atagttaagg	ataataagta	tcccaaagtc	79980
gataacgcgc	ataacgaagt	atltatactt	ttaggaaatc	acaatgactt	tatcagatta	80040
aaattaacaa	aattaaagga	gcattgtatt	ttttctgaat	atattgtgac	tccagatata	80100
tatggatctt	tatgcgtoga	attaaatggg	tctagttttc	agcacggcgg	tagatatata	80160
gaggtggagg	aatttataga	tgtcgaaga	caagttagat	ggtgttctac	atccaatcat	80220
atatctaaag	atataccoga	agatatgcac	actgataaat	ttgtcattta	tgatatatac	80280
acttttgacg	ctttcaagaa	taaacgattg	gtatttgtac	aggtacctcc	gtcgtagga	80340
gatgatagtc	atltgactaa	tccgttattg	tctccgtatt	atcgtaatc	agtagccaga	80400
caaatggtca	ataatatgat	ttttaatcaa	gattcatttt	taaaatattt	attagaacat	80460
ctgattagaa	gccactatag	agtttctaaa	catataacaa	tagttagata	caaggatacc	80520

-continued

---

gaagaattaa atctaacgag aatatgttat aatagagata agtttaaggc gtttgattc 80580  
 gcttggttta acggcgtttc ggaaaatgaa aaggtagtag atacgtataa aaaggtagct 80640  
 aatttgatat aatgaattca gtgactgtat cacacgcgcc atatactatt acttatcacg 80700  
 atgattggga accagtaatg agtcaattgg tagagtttta taacgaagta gccagttggc 80760  
 tgctacgaga cgagacgtcg cctattcctg ataagttctt tatacagttg aaacaaccgc 80820  
 ttagaaataa acgagtatgt gtgtgcggta tagatccgta tccgaaagat ggaactgggtg 80880  
 taccgttcga atcaccaaat tttaaaaaa aatcaattaa ggagatagct tcatctatat 80940  
 ctagattaac cggagtaatt gattataaag gttataacct taatataata gacgggggta 81000  
 taccctggaa ttattactta agttgtaaat taggagaaac aaaaagtcac gcgatttact 81060  
 gggataagat ttccaagtta ctgctgcagc atataactaa acacgtagt gttctttatt 81120  
 gtttgggtaa aacagatttc tcgaatatac gggccaagtt agaatccccg gtaactacca 81180  
 tagtcggata tcattccagcg gctagagacc gccaatcga gaaagataga tcatttgaaa 81240  
 ttatcaacgt ttactggaa tttagacaaca aggcacctat aaattgggct caagggttta 81300  
 tttattaatg ctttagtgaa attttaactt gtgttctaaa tggatgcggc tattagaggt 81360  
 aatgatgta tctttgttct taagactata ggtgtcccg cagcgtgcag acaaaatgaa 81420  
 gatccaagat ttgtagaagc atttaaatgc gacgagttag aaagatatat tgagaataat 81480  
 ccagaatgta cactattcga aagtcttagg gatgaggaag catactctat agtcagaatt 81540  
 tcatggatg tagatttaga cgcgtgtcta gacgaaatag attatttaac ggccattcaa 81600  
 gattttatta tcgaggtgtc aaactgtgta gctagattcg cgtttacaga atgcggcgcc 81660  
 attcatgaaa atgtaataaa atccatgaga tctaattttt cattgactaa gtctacaaat 81720  
 agagataaaa caagttttca tattatcttt ttagatacgt ataccactat ggatacattg 81780  
 atagctatga aacgaacact attagaatta agtagatcat ctgaaaatcc actaaccaga 81840  
 tcgatagaca ctgccgtata taggagaaaa acaactcttc gggttgtagg tactaggaaa 81900  
 aatccaaatt gcgacactat tcattgtaatg caaccaccgc atgataatat agaagattac 81960  
 ctattcactt acgtggatat gaacaacaat agttattact tttctctaca acaacgattg 82020  
 gaggatttag ttctgataa gttatgggaa ccagggttta tttcattcga agacgctata 82080  
 aaaagagttt caaaaatatt cattaattct ataataaact ttaatgatct cgatgaaaat 82140  
 aattttacia cggtagcact ggtcatagat tacgtaacac cttgtgcatt atgtaaaaaa 82200  
 cgatcgcata aacatccgca tcaactatcg ttgaaaatg gtgctattag aatttacaaa 82260  
 actggtaatc cacatagttg taaagttaaa attgttccgt tggatggtaa taaactgttt 82320  
 aatattgcac aaagaatttt agacactaac tctgttttat taaccgaacg aggagaccat 82380  
 atagtttggg ttaataattc atggaattt aacagcgaag aacccttgat acaaaaacta 82440  
 attttgtcaa taagacatca actacctaag gaatattcaa gcgaattact ctgtccaaga 82500  
 aaacgaaaga ctgtagaagc taacatacga gacatgtag tagattcagt agagaccgat 82560  
 acctatccgg ataaaactcc gtttaaaaat ggtgtattgg acctggtaga cggatgttt 82620  
 tactctggag atgatgctaa aaaatatacg tgtactgtat caaccggatt taaatttgac 82680  
 gatcaaaagt tcgctgaaga cagtcagaa atggaagagt taatgaatat cattaacgat 82740  
 atccaacat taacggatga aaataagaaa aatagagagc tatatgaaaa aacattatct 82800  
 agttgtttat gtgggtctac caaaggatgt ttaacattct tttttggaga aactgcaact 82860

-continued

---

ggaaagtcca caaccaaaag tttgttaaag tctgctatcg gtgacctggt tgttgagacg 82920  
 ggtcaaacaa ttttaacaga tgtattggat aaaggaccta atccatttat cgctaacatg 82980  
 catttgaaaa gatctgtatt ctgtagcgaa ctacctgatt ttgcctgtag tggatcaaag 83040  
 aaaattagat ctgacaatat taaaaagttg acagaacctt gtgtcattgg aagaccgtgt 83100  
 ttctccaata aaattaataa tagaaacctat gcgacaatca ttatcgatc taattacaaa 83160  
 cctgtttttg ataggataga taacgcatta atgagaagaa ttgcccgtgt gcgattcaga 83220  
 acacactttt ctcaaccttc tggtagagag gctgctgaaa ataataagcgc gtacgataaa 83280  
 gtcaaaactat tagacgaggg gtttagatgg aaaatacaaa ataatagata tagatttgca 83340  
 tttctatact tgttgggtgaa atggtagaga aaatatcatg ttctatttat gaaactatat 83400  
 cctacaccog aagagattcc tgactttgca ttctatctca aaataggtac tctgttagta 83460  
 tctagctctg taaagcatat tccattaatg acggacctct ccaaaaaggg atatatattg 83520  
 tacgataatg tggttactct tccggtgact actttccaac agaaaatate caagtatttt 83580  
 aattctagac tatttgagca cgatatagag agcttcatca atagacataa gaaatttgcc 83640  
 aatgtagtg atgaatatct gcaatatata ttcatagagg atatttcatc tccgtaaata 83700  
 tatgtcata tatttataga agatatcaca tatctaaatg aataccggaa ttatagattt 83760  
 atttgataat catgttgata gtataccaac tatattacct catcagttag ctactctaga 83820  
 ttatctagtt agaactatca tagatgagaa cagaagcgtg ttattgttcc atattatggg 83880  
 atcaggtaaa acaataatcg ctttgttgtt cgccttggtg gcttccagat ttaaaaaggt 83940  
 ttacattcta gtccgaaca tcaacatctt aaaaatttc aattataata tgggtgtagc 84000  
 tatgaacttg tttaatgacg aattcatagc tgagaatate tttattcatt ccacaacaag 84060  
 tttttattct ctttaattata acgataacgt cattaattat aacggattat ctctctacaa 84120  
 taactctatt tttatcgttg atgaggcaca taatatcttt gggaaataa ctggagaact 84180  
 tatgaccgtg ataaaaaata aaaacaagat tccctttcta ctattgtctg gatctcccat 84240  
 tactaacaca cctaataatc tgggtcatat tatagattta atgtccgaag agacgataga 84300  
 ttttgggtgaa attattagtc gtggtaagaa agtaattcag acacttctta acgaacgcgg 84360  
 tgtgaatgta ctttaaggatt tgcctaaagg aagaatatca tattacgaaa tgctgataa 84420  
 agatctacca acgataagat atcacggacg taagtttcta gatactagag tagtatattg 84480  
 tcacatgtct aaacttcaag agagagatta tatgattact agacgacagc tatgttatca 84540  
 tgaaatgttt gataaaaaata tgtataacgt gtcaatggca gtattgggac aacttaactc 84600  
 gatgaataat ttagataact tatttcagga acaggataag gaattgtacc caaatctgaa 84660  
 aataaataat ggcgtgttat acggagaaga attggtaacg ttaaacatta gttccaaatt 84720  
 taaatacttt attaactgga tacagacact caacggaaaa cattttatat acttttctaa 84780  
 ttctacatat ggcggattgg taattaata tatcatgctc agtaatggat attctgataa 84840  
 taatggttct cagggaaact atccacatat aataaacggc aaacaaaaa catttgctat 84900  
 cgttactagt aaaatgaaat cgtctttaga ggatctatta gatgtgtata attctctgca 84960  
 aaacgatgat ggtagtcaat tgatgttttt gtttctatca aacattatgt ccgaatccta 85020  
 tactctaaaa gaggtaaggg atatttgggt tatgactatc ccagatactt tttctcaata 85080  
 caaccaaatt cttggacgat ctattagaaa attctcttac gccgatattt ctgaaccagt 85140  
 taatgtatat ctttagccg ccgatatctc cgatttcaat gacgaagtga cgtcattaaa 85200  
 cgattacaca caggatgaat taattaatgt tttaccattt gacatcaaaa agctgttata 85260

-continued

---

tctaaaat	t	aagacgaaag	aaacgaatag	aatatactct	attcttcaag	agatgtctga	85320
aacgtattct	c	ttccaccac	atccatcaat	tgtaaaagt	ttattgggag	aattggtcag	85380
acaatttttt	t	tataataatt	ctcgtattaa	gtataacgat	accaagtac	ttaaaatggt	85440
tacatcagtt	a	ataaaaaata	aagaagacgc	taggaattac	atagatgata	ttgtaaacgg	85500
tcacttcttt	g	tatcgaata	aagtatttga	taaactcttt	ttatacaaat	acgaaaacga	85560
tattattaca	g	taccgttta	gactttctca	cgaaccattt	gtttggggag	ttaactttcg	85620
taaagaatat	a	aacgtggtat	cttctccata	aaactgatga	gatataataa	gaaataaatg	85680
tcgagctttg	t	taccaatgg	atacccttcc	gttacattgg	aacctcatga	gctgacgtta	85740
gacataaaaa	c	taataattag	gaatgcccga	tataagacgt	atctccatag	agaaattagt	85800
ggtaaaatgg	c	ccaagaaaat	agaaattcgt	gaagacgtgg	aattacctct	cggcgaataa	85860
gtaataaatt	c	tgtagttat	aaacgttccg	tgtgtaataa	cctacgcgta	ttatcacgtt	85920
ggggatatag	t	cagaggaac	attaacatc	gaagatgaat	caaatgtaac	tattcaatgt	85980
ggagatttaa	t	ctgtaaaact	aagtagagat	tcgggtactg	tatcatttag	cgattcaaa	86040
tactgctttt	t	tcgaaatgg	taatgcgat	gacaatggca	gcgaagtcac	tgccgttcta	86100
atggaggctc	a	aacaggtat	cgaactag	ttgttttttc	tcgcgaatat	cgtcgactca	86160
taagaaagag	a	aatagcggta	agtataaaca	cgaatactat	ggcaataatt	gcgaatggtt	86220
tattctcttc	g	atataat	tgataat	tgataat	tgataat	tgataat	86280
atctcataaa	a	atagttctcg	cgcgctggag	aggtagttgc	tgctcgtata	atctctccag	86340
aataatatac	t	tgctgtctg	tcgttcaatt	tatacggatt	tctatagttc	tctgttatat	86400
aatgcggttt	t	ccatcatga	ttagacgacg	acaatagtgt	tctgaattta	gatagttgat	86460
cagaatgaat	g	tttattggc	gttgaaaaa	ttatccatc	agcgtctgca	gagtgtctga	86520
tagttgttcc	t	agatagta	aaataatcca	acttactagg	cagcaaattg	tctagataaa	86580
atactgaatc	a	aacgggtgca	gacgtattgg	cggatcta	ggaatccaat	tgattaacta	86640
tcttttgaaa	a	atatacatt	ttatgatcca	atacttgtaa	gaatatagaa	ataatgataa	86700
gtccatcatc	g	gtgtttttt	gctcttctat	aagaactata	ttttttctta	ttccaatgaa	86760
caagattaat	c	ctctccagag	tatttgtaca	catctatcaa	gtgattggat	ccataatcgt	86820
cttctcttcc	c	caatatata	tgtagtgatg	ataacacata	ttcattgggg	agaaaccctc	86880
cacttatata	t	ctctcttca	aaattaatcc	ttactagttt	tccagtgttc	tggatagttg	86940
ttggtttoga	c	ctcattataa	tgtatgtcta	acggcttcaa	tcgcgcgtta	gaaattgctt	87000
ttttagtttc	t	tatattaata	ggagatagtt	gttgcggcat	agtaaaaatg	aaatgataac	87060
tgtttaaaaa	t	agctcttag	tatgggaatt	acaatggatg	aggaagtgat	atttgaaact	87120
cctagagaat	t	aatatctat	taaacgaata	aaagatattc	caagatcaaa	agacacgcat	87180
gtgtttgctg	c	gtgtataaac	aagtgcgga	tatccgttaa	taggagctag	aagaacttca	87240
ttcgcgttcc	a	ggcgatatt	atctcaacaa	aattcagatt	ctatctttag	agtatccact	87300
aaactattac	g	gtttatgta	ctacaatgaa	ctaagagaaa	tcttttagacg	gttgagaaaa	87360
ggttctatca	a	acaatatoga	ctctcacttt	gaagagttaa	tattattggg	tggtaaacta	87420
gataaaaagg	a	aatctattaa	agattgttta	agaagagaat	taaaagagga	aagtgatgaa	87480
cgtataacag	t	aaaagaatt	tggaaatgta	attctaaaac	ttacaacacg	ggataaatta	87540
tttaataaag	t	tatatataag	ttattgcctg	cgtgttttta	ttaatcaatc	gttggaggat	87600

-continued

---

ttatcgcata ctagtattta caatgtagaa attagaaaga ttaaatcatt aaatgattgt 87660  
 ataacgcagc ataatacga atatctgtct tatatttata atatgctagt taatagtaaa 87720  
 tgaactttta cagatctagt ataattagtc agattattaa gtataataga cgactagcta 87780  
 agtctattat ttgcgaggat gactctcaaa ttattacact cacggcattc gttaaccaat 87840  
 gcctatggtg tcataaacga gtatccgtgt ccgctatfff attaactact gatacaaaaa 87900  
 tattagtagt taacagacga gatagttttc tctattctga aataataga actagaaaca 87960  
 tgtttagaaa gaaacgatta tttctgaatt attccaatta tttgaacaaa caggaaagaa 88020  
 gtatactatc gtcatttttt tctctagatc cagctactac tgataatgat agaatagacg 88080  
 ctatttatcc ggggtggcata cccaaaaggg gtgagaatgt tccagagtgt ttatccaggg 88140  
 aaattaaaga agaagttaat atagacaatt cttttgtatt catagacact cggtttttta 88200  
 ttcattggcat catagaagat accattatta ataaatfff tgaggtaatc ttctttgtcg 88260  
 gaagaatata tctaacgagt gatcaaatca ttgatacatt taaaagtaat catgaaatca 88320  
 aggatctaata attttttagat ccgaattcag gtaatggact ccaatacga attgcaaat 88380  
 atgctctaga tactgcaaaa cttaaatgtt acggccatag aggatgttat tatgaatcat 88440  
 taaaaaaatt aactgaggat gattgattag aaaatataaa ttaatttacc atcgtgtatt 88500  
 tttataacgg gattgtccgg catatcatgt agatagttac cgtctacatc gtatactcga 88560  
 ccatctacgc ctttaaatcc tctattttat gacattaatc tattagaatt ggaataccaa 88620  
 atattagtag cctcaattag tttattggta atatttttt tagacgatag atcgtggct 88680  
 cttgaaacca aggttttcca accggactca ttgtcgatcg gtgagaagtc tttttcatta 88740  
 gcatgaatcc attctaata tgtatgttta aacactctaa acaattggac aaattctttt 88800  
 gatttgcttt gaatgatttc aaataggtct tcgtctacag taggcatacc attagataat 88860  
 ctagccatta taaagtgcac gtttacatat ctacgttctg gaggagtaag aacgtgacta 88920  
 ttgagacgaa tggctcttcc tactatctga cgaagagacg cctcgttcca tgcataatct 88980  
 aaaatgaaga tatcattaat tgagaaaaaa ctaataacct cgctccact agaagagaat 89040  
 acgcatgttt taatgcattc tccgtagtg tttgattctt gggtaaactc agccaccgcc 89100  
 ttgattctag tatcttttgt tctagatgag aactctatat tagagatacc aaagactttg 89160  
 aaatatagta ataagatttc tattctctgac tgattaacaa atggttcaaa gactagacat 89220  
 ttaccatggg atgctaatat tcccaaacat acatctataa atttgacgct tttctctttt 89280  
 aattcagtaa atagagagat atcagccgca ctageatccc ctttcaatag ttctcccttt 89340  
 ttaaaggat ctaatgcgga tttagaaaac tttctatctc ttaatgaatt tttaaaatca 89400  
 ttatatagtg ttgctatctc ttgcgctgat tcgccggat cacgattttg tctttcagga 89460  
 aagctatcga acgtaaactg agtagccata cgtctcagaa ttctaaatga tgatatacct 89520  
 gtttttttt cagcaggttt agccttttga taaatttctt cttgcttttt cgacatatta 89580  
 acgtatcga ttaactactgt tttcttagcg aatgatgcag acccttctac gtcatacaaaa 89640  
 atagaaaact cgttattaac tatatacga cataggcctc ctagtttgga gactaattct 89700  
 ttttcatcga ctagacgttt attctcaaat agcgattggg gttgtaagga tcctggctcg 89760  
 agtaagttaa ccaacatggg gaattcttgc acactattga cgatagggtg agccgataaa 89820  
 caaatcatct tatggttttt taacgcaatg gtcttagata aaaaattata tactgaacga 89880  
 gtaggacgga tcttaccatc ttctttgatt aatgatttag aaatgaagtt atgacattca 89940  
 tcaatgatga cgcataattct actcttgaa ttaatagttt tgatattagt aaaaaattta 90000

-continued

---

tttctaaaat tttgatcadc gtaattaata aaaatacaat ccttcgttat ctctggagcg 90060  
 tatctgagta tagtgttcat ccaaggatct tctatcaaag cctttttcac caataagata 90120  
 atagcccaat tcgtataaat atccttaaga tgtttgagaa tatatacagt agtcattggt 90180  
 ttaccgacac ccgtttcatg gaacaataaa agagaatgca tactgtctaa tectaagaaa 90240  
 actcttgcta caaaatgttg ataatccttg aggcgtacta cgtccgaccc catcatttca 90300  
 acgggcatat tagtagttct gcgtaaggca taatcgatat aggcgcgctg tgatttactc 90360  
 atttatgagt gataagtaat aactatgttt taaaaatcac agcagtagtt taactagtct 90420  
 tctctgatgt ttgttttoga tactttttga atcagaagtc atactagaat aaagcaacga 90480  
 gtgaacgtaa tagagagctt cgtataactct attcgaaaac tctaagaact tattaatgaa 90540  
 ttccgatatcc actggattgt ttaaaataact aaattgaaca ctgttcacat ccttccaaga 90600  
 agaagactta gtgacggact taacatgaga cataaataaa tccaaatfff ttttcaaac 90660  
 atcactagcc accataatgg cgctatcctt caaccagcta tcgcttacgc attttagcag 90720  
 tctaacatff ttaagagac tacaatatat tctcatagta tcgattacac ctctaccgaa 90780  
 taaagttgga agtttaataa tacaatattt ttcgtttaca aaatcaaata atggtcgaaa 90840  
 cacgtcgaag gttaacatct tataatcgct aatgtataga ttgttttcag tgagatgatt 90900  
 attagattta atagcatctc gttcacgttt gaacagtta ttgcgtgcgc tgaggtcggc 90960  
 aactacggcg tccgctttag tactcctccc ataactctt acgctattaa tctttaaaf 91020  
 ttcatagact ttatctagat cgctttctgg taacatgata tcatgtgtaa aaagttttaa 91080  
 catgtcggtc ggcattctat ttgatcatt aactctagaa atctgaagaa agtaattagc 91140  
 tccgtattcc agactagga atgggctttt acctagagac agattaagtt ctggcaatgt 91200  
 ttcataaaaf ggaagaagga catgcgctcc ctcccggata ttttttcaa tttcatccat 91260  
 ttacaactct atagtttgtt ttcattatta ttagtatta tctoccataa tcttggtaat 91320  
 acttaccctc tgatcgtaa atacctata caggtoatta catacaacta ccaattgttt 91380  
 ttgtacataa tagattggat ggttgacatc catggtggaa taaactctc gaacagatag 91440  
 tttatcttcc cccctagata cattagcctt aatagttgtc ggccctaaaga atatctttgg 91500  
 tgtaaagtta aaagttaggg ttcttgttcc attattgctt tttgtcagta gttcattata 91560  
 aattctcgag atgggtccgt tctctgaata tagaacatca tttccaaatc taactctag 91620  
 tctagaaata atatcggtct tattcttaaa atctattccc ttgatgaagg gatcgttaat 91680  
 gaacaaatcc ttggcctttg attcggtga tctattatct ccgctataga cgttacgctg 91740  
 actagtccaa agacttacag gaatagatgt atcgatgatg ttgatactat gtgatatgtg 91800  
 agcaaagatt gttctcttag tggcatcact atatgttcca gtaatggcgg aaaacttttt 91860  
 agaaatgta tatataaaag aatftttctg tgttccaaac attagcagat tagtatgaag 91920  
 ataaacactc atattatcag gaacattatc aatftttaca tacacatcag catcttgaat 91980  
 agaaacgata ccactctctg gaacctctac gatctcgga gactccggat aaccagtcgg 92040  
 tggaccatcg ctaacaataa ctgatcadc caacaatcta ctacatctg catctatata 92100  
 atctttttca tcttgtgagt accctggata cgaaataaat ttattatccg tatttccata 92160  
 ataaggttta gtataaacag agagagatgt tgccgcatga acttcagtta cagtcgccgt 92220  
 tgggttggtt atttgaccta ttactctcct aggtttctct ataaatgatg gtttaatttg 92280  
 tacattctta accatatac caataaagct caattcagga acataaacia attctttgtt 92340

-continued

---

gaacgtttca aagtccaacg aagagtcacg aataacgata tcggatactg gattgaaggt 92400  
 caccgttacg gtaatttttg aatcggatag ttaagactg ctgaatgtat cttccacatc 92460  
 aaacggagtt ttaataataa cgtatactgt agatggttct ttaatagtgt cattaggagt 92520  
 taggccaata gaaatatcat taagtccact agaatatcca gagtgtttca aagcaattgt 92580  
 attattgata caattattat ataattcttc gccctcaatt tcccaataa caccgttaca 92640  
 cgaagagata gatcgtgat taatacattt atatccaaca tatggtagct aactgaatct 92700  
 tcccatacct ttaactcttg gaagttccaa actcagaacc aatgattaa gcgcagtaat 92760  
 atactgatcc ctaatttoga agctagcgt agcctgattg tctggaccat cgtttgtcat 92820  
 aactccggat agagaaatat attgcggcat atataaagtt ggaatttgac tatcgactgc 92880  
 gaagacatta gaccgtttaa tagagtcac cccaccgatc aaagaattaa tgatagtatt 92940  
 attcattttc tatttaaaat ggaaaaagct tacaataaac tccgtagaga aatatctata 93000  
 attttgagat tttccttaaa gtaacagctt ccgtaaacgc cgtctttatc tcttagtagg 93060  
 tttattgtat ttatgacctt ttccttatct tcatagaata ctaaaggcaa caaagaatt 93120  
 tttggttctt ctctaagagc tacgtgagac ttaaccatag aagccaacga atccctacat 93180  
 attttagaac agaataacc tacttccacca cccttgtagt tctcaatact aataggtcta 93240  
 aaaaccaaat cttgattaca aaaccaacac ttatcaatta cactatttgt cttaatagac 93300  
 acatctgcca tagatttata atactttggt agtatacaag cgagtgtctc ttctttagcg 93360  
 ggcttaaaga ctgcttagg tgetgaaata accacatctg gaaggttac tcgcttagcc 93420  
 atttaattac ggaactattt ttttatactt ctaatgagca agtagaaaac ctctcatcta 93480  
 caaaaacgta ctcggtgcca taatcctcta ccatagttac acgtttttta gatctcatat 93540  
 gtgctaaaaa gttttcccat actaattggt tactattatt tttcgtataa tttttaacag 93600  
 tttgaggttt tagattttta gttacagaag tgatcgaag tattttatcc aaaaagaatg 93660  
 aataattaat tgtcttagaa ggagtgtttt cttggcaaaa gaataccaag tgcttaaata 93720  
 tttctactac ttcattaatc tttctgtac tcagattcag tttctcatct tttacttgat 93780  
 tgattatttc aaagactaac ttataatcct ttttattat tctctcgtta gccttaagaa 93840  
 aactagatag aaaatttgca tctacatcat ccgtggatag ttgatttttt tccatgatag 93900  
 ccaagagttc cgagataatt tctccagaac attgatgaga caataatctc cgcaatacat 93960  
 ttctcaaatg aataagttta ttagacacgt ggaagtttga cttttttgt acctttgtac 94020  
 atttttgaaa taccgactcg caaaaaatac aatattcata tccttggtca gatactatac 94080  
 cgttgtgtct acaaccgcta cataatcgta gattcatggt aacactctac gtatctcgtc 94140  
 gtccaatatt ttatataaaa acattttatt tctagacgtt gccagaaaat cctgtaatat 94200  
 ttttagtttt ttgggctgtg aataaagat gcgccataa tggttaccgt cttccgcca 94260  
 tatagtagtt aaattatccg cacatgcaga agaaccaccg ttaggcggat tcagtacaat 94320  
 gttatatttt tcgtaccaac tcatttaaat atcataatct aaaaatgttc tgtaatatgt 94380  
 ctagcgctaa tatattgatc ataactctgt gcataaatta agatacaaca atgtctcga 94440  
 atcatcgaca tggcttcttc catagttaga agatcgtcgt caaagttagc aacgtgattc 94500  
 atcaacattt gctgttttga ggcagcaaat actgaaccgt cgccattcaa ccattcataa 94560  
 aaaccatcgt ctgaatccat tgataattc ttgtactggt ttttgagagc tcgcatcaat 94620  
 ctagcatttc tagctcccg attgaaaaca gaaagaggat cgtacatcca ggttccattt 94680  
 tctgtaataa gaatcgata atgtcccttc aagaagatat cagacgatcc acaatcaag 94740

-continued

---

aattggtctc cgagtttgta acaaaactgcg gactttaacc tatacatgat accgttttagc 94800  
ataatttctg gtgatacgtc aatcggagta tcatctatta gagatctaaa gccggtgtaa 94860  
cattctccac caaacatatt cttattctga cgtcgttcta cataaaacat cattgctcca 94920  
ttaacgataa caggggaatg aacagcacta cccatcacat tagttcccaa tggatcaatg 94980  
tgtgtaactc cagaacatct tccatagcct atgtaggag gagcgaacac cactcttcca 95040  
ctattgcoat cgaatgcoat agaataaata tccttggaaat tgatagaaat cggactgtcg 95100  
gatgttgta tcatcttcat aggattaaca actatgtatg gtgcgcctg aagtttcata 95160  
tcgtaactga tgccgtttat aggtctagcc acagaaacca acgtaggctt aaatccaact 95220  
atagacaaaa tagaagccaa tatctgttcc tcatctgtca taacttgaga gcatccagta 95280  
tgaataatct tcattagatg gggatctacc gcatcatcat cgttacaata aaaaattccc 95340  
attctaagt tcataattgc ttttctaate atggtatgca tgtttgctct ctgaatctct 95400  
gtgaaatta gatctgatac acctgtaate actatcggat tatcctccgt aagacgatta 95460  
accaacaaca tataattata agactttact tttctaaatt cataaagtgt ctggattagg 95520  
ctataggtgt ctccatgtac atacgcgttc tcgagcgcag gaagttaaat accgaatagt 95580  
gccatcagaa taggatgaat atagtaatta gtttctggtt ttctataaat aaaagacaaa 95640  
tcttgtgaac tagacatate ggtaaaatgc atggattgga atcgtgtagt cgacagaaga 95700  
atatgatgat tagatggaga gtatatttta tctaactctt tgagtgggtc accgattcta 95760  
ggactagctc gagaatgaat aagtactaaa ggatgagtac atttcacaga aacactagca 95820  
ttgttcaatg tgctctttac atgggtaagg agttgaaata gctcgtttct atttgttctg 95880  
acaatattta gtttatcoat aatgtaagc ataccctgaa tagtaaagtt agatgtgtca 95940  
tacttgtag tagttagata tttagcaatt gcattcccat catttctcaa tctcgtactc 96000  
caatcatgtg tagatgtac ttcactata gaaaccatac aatccttttt gataggctgt 96060  
tgagattgat tatttcctgc acgtttagggt ttggtacgtt gatttctagc cctgcggat 96120  
ataaagtcac cgtctacaat ttgggacaat gaattgcata cactacaaga caaagattta 96180  
tcagaagtgt gaatgatc ttcactatac aaagaaagag tttgattagt ataactagat 96240  
tttagtctg cgtagatgt taaaaaaca tcgctattga ccacggcttc cattatttat 96300  
attcgtagtt tttactcgaa agcgtgattt taatatccaa tcttattact tttggaatcg 96360  
ttcaaaacct ttgactaatt gtagaatttg atctattgcc ctacgcgtat actcccttgc 96420  
atcatatacg ttcgtcacca gatcgtttgt ttcggcctga agttggtgca tatctcttc 96480  
aacattcgac atgagatcct taagggccat atcgtctaga ttttgttgag atgttgctcc 96540  
tggatttggg ttttgttggt ctgttgtaaca tactgtacca ccagtaggtg taggagtaca 96600  
tacagtggcc acaataggag gttgaggagg tgtaaccgtt ggagtgtac aagaaatact 96660  
tccatccgat tgttggttac atgtagttgt tggtaaccgc tgagaagggt gggtagatgg 96720  
cgggtgctgc gtcttttgat ctttattaaa tttagagata atatcctgaa cagcattgct 96780  
cggcgtcaac gctggaagga gtgaaactgc cggcgcacga gtatctgcag acagccaatc 96840  
aaaaagatta gacatatcag atgatgtatt agtttgttgt cgtggttttg gtgtaggagc 96900  
agtactacta ggtagaagaa taggagccgg tgtagctgtt ggaaccggct gtggagttaa 96960  
atgaatagtt ggttgtagcg gttggatagg ctgtctgctg cggccatca tattatctct 97020  
agctagttgt tctcgaact gtctttgata atacgactct tgagacttta gtcctatctc 97080

-continued

---

```

aatcgcttca tcctttttcg tatccggatc cttttcttca gaataataga ttgacgactt 97140
tgggtgtagag gattctgccca gcctctgtga gaacttgta aagaagtcca ttttaaggctt 97200
taaaattgaa ttgcgattat aagattaaat ggcagacaca gacgatatta tcgactatga 97260
atccgatgat ctcaaccgaat acgaggatga tgaagaagag gaagaagatg gagagtcact 97320
agaaactagt gatatagatc ccaaatcttc ttataagatt gtagaatcag catccactca 97380
tatagaagat gcgcattoaca atcttaaaca tatagggaaat catatatctg ctcttaaacg 97440
acgctatact agacgtataa gtctatttga aatagcgggt ataatagcag aaagctataa 97500
cttgcttcaa cgaggaagat tacctctagt ttcagaattt tctgacgaaa cgatgaagca 97560
aaatagcta catgtaatta tacaagagat agaggagggt tcttgctcta tagtcatcga 97620
aaagaacgga gaattgttgt cggtaaacga ttttgacaaa gatggtctaa aattccatct 97680
agactatatt atcaaaattt ggaacttca aaaacgatat tagaatttat acgaatatcg 97740
ttctctaaat gtcacaatca agtctcgcat gttcagcaat ttattgtcgt actttatate 97800
gtgttcatta acgatattct gcaaaaatag aatgattcta tcttctctcg atagatattc 97860
ttcagagatt attgtcttat attccttctt gttatccgat atgaatttga taagactttg 97920
aacattattg ataccgctct gtttaatttt ttctacagat attttagttt tggcagattc 97980
tatcgtatct gtcaatagac atccaacatc gacattcgac gtcaattgtc tataaatcaa 98040
cgtataaatt ttgaaataa cattagcgaa ttggtgtgcg ttgatgtcgt tattctgaaa 98100
cagtatgatt ttaggtagca tttcttaac aaagagaacg tatttattgt tactcagttg 98160
aacagatgat atatccagat tactaacgca tctgattccg tataccaaac tttcagaaga 98220
aatggtatac aattgtttgt attcattcaa tgtctctttt tcagaaatta gtttagagtc 98280
gaatactgca ataattttca agagatagtt ttcacagat aagattttat ttagtgtaga 98340
tatgataaaa ctattgtttt gttggagAAC tgatacgcg cgttctcgtg tcgacgctct 98400
caaatgggaa acaatctoca ttattttttt ggaatcggat acaatatctt cggtatcttg 98460
acgcagtcta gtatacatag agttaagaga gatttagggt tgtacattaa gcaacatgtc 98520
tctaaatgtg gctacaaact tttcctttc cacatcatct agtttattat ataccgattt 98580
cacaacggca ccagatttaa ggaaccagaa tgaaaaactc tgataactac aatatttcat 98640
catagttacg attttatcat ctctatagtt tgggtgtaata ggcataacct ttttctccaa 98700
gactggaacc aacgtcataa aaatgtttaa atcaaaatcc atatcaacat ctgatgcgct 98760
aagaccagtc tcgcgttcaa gattatcttt actaatggtg acgaactcat cgtagagaac 98820
tctaagtttg tccattatth atttacagat ttagtgtttt aatttatttg tgetcttcca 98880
gagttgggat agtatttttc taacgtcggg attatattat taggatctac gttcatatgt 98940
atcataatat taatcatcca cgttttgata aatctatctt tagcttctga aataacgfat 99000
ttaaacaag gagaaaaata tttagctacg gcatcagacg caataacatt ttttgtaaat 99060
gtaacgtatt tagacgacag atcttcgta aaaagttttc catctatgta gaatccatcg 99120
gttgtaaca ccattcccgc gtcagattga ataggagttt gaatagtttg ttttgaaat 99180
agatccttca ataacttata gttgggtggg aaaaaatcga ttttatcact agactctttc 99240
tttttacta tcattactc atgaactatt tcttgaatga gtatatgtat tttcttccct 99300
atateggagc cgttcattgg aaaatatacc atgtcgtaa ctataagaat atttttatcc 99360
tcgtttcaa actgaataat atcagatgta gttcgtaaac gaactatate atcaccagca 99420
caacatctaa ctatatgata tccactagtt tcttttagtc gtttattatc ttgttccata 99480

```

-continued

---

```

ttagcagtc tccatcatt taagaaggcg tcaaaaataa tagggagaaa tgacattttg 99540
gattctgtta caactttacc aaaattaagg atatacggac ttactatctt tttctcaacg 99600
tcgatttgat gaacacacga tgaaaatgtg ctccgatgag attgatcatg tagaaaaaca 99660
caagggatac aatatttccg catatcatga aatatattaa gaaatcccac cttattatat 99720
ttccccaag gatccatgca cgtaaacatt atgccgttat cattaataaa gacttctttc 99780
tcatcggatc tgtaaaagtt gttactgatt tttttcattc caggatctag ataattaata 99840
atgatgggtt ttctattctt attccttgta ttttggcata tcctagacca gtaaacagtt 99900
tccactttgg taaaatcagc agacttttga acgctattaa acatggcatt aatggcaata 99960
actaaaaatg taaaatattt ttctatgtta ggaatatggt ttttcacttt aatagatata 100020
tggtttttgg ccaaaatgat agatattttt ttatccgagg atagtaaaat attattagtc 100080
gccgtctcta taaaatgaa gctagtctcg atatccaatt ttattctaga attgatagga 100140
gtcgcctaat gtaccttata cgttatatct cccctgatgc gttccatttg tgtatctata 100200
tcggacacaa gatctgtaaa tagttttacg ttattaatca tcacggatc gccgtcgcta 100260
gataacgcta atgtaccatc caagtcocaa atggagagat ttaactgttc atcgtttaga 100320
ataaaatgat taccggctat attaataaag tgttcacgt atctagataa caacgactta 100380
taattaatgt ccaagtcttg aactcgtga atgatcttt ttaaccagtg tagttttaga 100440
ttggtacgaa atatattgtt aaactttgat tctacagtaa tgtccaaatc tagttgtgga 100500
aatacttcca tcaacattgt ttcaaacttg ataattattt tatctacatc ttcgtacgat 100560
ccaaattccg gaatagatgt atcgcacgct ctggccacc agataacca aaagtcacac 100620
gctccaggat atacattgta taaaaagcta tcgtttttta gtagggtttt tttctgctg 100680
tatacgaagg gattaaaaat agtattatca acgtaactat attccaaatt attcttatga 100740
gaatagataa taatctcgtc cttaatatct aacaaatttc ctaaatatcc ctttaattga 100800
gtcattcgaa gcgtcaatag aatatgtctc ttaactattt ccggtgtgtg tatatttaa 100860
tgacttcgta aaaaaataa tatgggcgac ttctcatcta tgtaatcata tggagtgaga 100920
tatagggctc gttctacctc ctgcccctta cccacctgta ataccaattg cggacttact 100980
atatacgc a ttttatatc gtggggtaaa gtgaaaatct actaccgatg atgtaagtct 101040
tacaatgttc gaaccagtac cagatcttaa tttggaggcc tccgtagaac taggggaggt 101100
aaatatagat caaacaacac ctatgataaa ggagaatagc ggttttatat cccgtagtag 101160
acgtctatc gcccatagat ctaaggatga tgagagaaaa ctagcactac gattcttttt 101220
acaaagactt ttttttttag atcatagaga gattcattat ttgttcagat gcgttgacgc 101280
tgtaaaagac gtcactatta ccaaaaaaaaa taacattatc gtggcgcctt atatagcact 101340
tttaactatc gcatcaaaag gatgcaaact tacagaaaca atgattgaag cattctttcc 101400
agaactatat aatgaacata gtaagaaatt taaattcaac tctcaagtat ccatcatcca 101460
agaaaaactc ggataccagt ttggaaacta tcacgtttat gattttgaac cgtattactc 101520
tacagtagct ctggctatc gagatgaaca ttcatctggc atttttaata tccgtcaaga 101580
gagttatctg gtaagttcat tatctgaaat aacatataga ttttatctaa ttaatctaaa 101640
atctgatctt gttcaatgga gtgctagtag gggcgtgta attaatacaa tggtaaac 101700
tgtattgatt acagtgtatg aaaagttaca actggtcata gaaaatgatt cacaatttac 101760
atgttcattg gctgtggaat caaaacttcc aataaaaata cttaagata gaaatgaatt 101820

```

-continued

---

```

atttacaaaa ttcattaacg agttaaaaa gaccagtcca ttcaagataa gcaaacgcga 101880
taaggatacg ctactaaaat attttactta ggactggagt tagaatttat agacgactca 101940
tttcgtttat cattgttact attattacta ttactatcat tattagtgtt ggcattatta 102000
gtattcctct tgatccttg ttcagaaata tacagcaatg ctatacctaa tactaaatac 102060
attatcatgc tcgcaatggc tctaacaaca acgaaccaa atgaatttgg tcgtagcttt 102120
tgttcacaaa aatacataaa gaaatgtcta cataaatcta tggcgccatt ggctacttga 102180
aatagcgcca gtctctctac agattttaat atagctgtat aacatgacat ttattcatca 102240
tcaaaagaga cagagtccac atctgtcata tttagatttt ttttcatgtg ttcaaagat 102300
cctctactca tttcattata atagtttata atacttagaa ttttaggacg gatcaatgag 102360
taagacttga ctagatcgtc agtagtaatt tgtgcatcgt ctattctgca tccgcttcgt 102420
cgaataatgt atagcatcgc tttgagattc tccatagcta tcaagtcttt atacaatgac 102480
atggaaatat ctgtgaatac tttatacttc tccaacatcg atgccttaac atcatcgct 102540
actttagcat tgaaaatcgc ttctattgtg tagatggatg tagcaagatt ttaaaacaat 102600
aatgcatct tacacgatga ttgcctcaag tctccaatcg tttgtttaga acgattagct 102660
acagagtcca atgcttggt gactagcata ttattatctt tagaaattgt attcttcaat 102720
gaggcgttta tcatatctgt gatttcgta gtcattatc agtctgactg ggttghtaatg 102780
ttatccaaca tatcacctat ggatacggta cacgtaccag catttghtaat aatcctatct 102840
aagatgttgt atggcattgc gcagaaaata tcttctctcg taatatctcc actctcgata 102900
aatctactca gattattctt aaatgcctta ttctctggag aaaagatctc agtgtccatc 102960
atctcattaa tagtatacgc agaaaagata ccacgagtat caattctatc caagatactt 103020
atcggttcog agtcacagat aatggtttcc tctccttcgg gagatcctgc atagaaatat 103080
ctaggacaat agtttctata ctgtctgtaa ctctgataat ctctaaagtc actaactgat 103140
accatgaaat tgagaagatc aaacgctgaa gtaattaatt tttctgctc gtttttacta 103200
caactagttt tcatcaatgt agtgacgatg tattgttttag ttacttttgg tctaactactg 103260
atgatagaga tattattgct tcccataatg gatcttctag tagtcacctt aaagcccatt 103320
gatgcgaata gcagatagat aaagtcttgg tatgactcct ttctaataa gtacggacta 103380
cctttgtcac ccaactttat accacataa gccataacaa cctctttaat agccgtttca 103440
tgaggtttat cagccatgag cctgagtagt tggagaatc tcatgaatcc cgtctcagaa 103500
agtctatat gcgatgata tttatcttcc ctgggaaact ctggtatagt catagatgaa 103560
atactcttca aagtttctga aataagatta gtaacagtct tacctccgac tactctaggt 103620
aacaacaaa ctctaatagg tgttttctct gcggagataa tatcagaaag gatagagcaa 103680
taagtatgat tattgtgatt ataaagaccg aatacataac aggtagaatt tataaacatc 103740
atgtcctgaa ggtttttaga cttgtattcc tcgtaatcca taccgtccca aaacatggat 103800
ttggttaact tgatagcgt agatcttctg tccttcgcca acaggttaa gaaattaata 103860
aagaatttgt tgtttctatt tatgtccaca aattgcacgt ttggaagcgc cacggttaca 103920
ttcactgcag cattttgagg atcgcgagta tgaagtacga tgttattggt tactggtata 103980
tctggaaaga aatctaccag tctaggaata agagattgat atcgcataga aatagtaaag 104040
tttataatct catcatcgaa gagcattttg ttaccattgt aataaatatc cactctgtca 104100
tatgtataaa tgaagtactg ttcaaacatg atgagatggt tatatgttgg catagtagtg 104160
agatcgacgt ttggtaatgg caatgtatta agattaactc cataatgtct agcagcatct 104220

```

-continued

---

gogatgttat aagcgtcgtc aaagcggggt cगतccttgta ttgttatata ttgtctaaca 104280  
cctataagat tatcaaaatc ttgtctgctt aatacacctg taacaatctt tgccttgaat 104340  
tctttttattg gtgcattaat aacatcctta tagaggatgt taaacaaata agtggttatca 104400  
aagttaagat ctggatattt cttttctgct agaacatcca ttgagtcgga gccatctggt 104460  
ttaatataac caccgataaa tctagctctg tattctgtat ccgtcaatct aatattaaga 104520  
agggtgttgag tgaaggtgg aagatcgtaa aagctgtgag tattaatgat aggattagtt 104580  
tccgaactaa tgtaattgg ggtattaata atatctatat tccagcgtt aagtgttaaca 104640  
ttaaacagtt ttaattcacg tgacgtggta tcaattaaat aattaatgcc caatttggat 104700  
atagcagcct gaagctcatc ttgttttagtt acggatccta atgagttatt aagcaatata 104760  
tcgaacggat gaacgaaggt tgttttaagt tggtcgcata ctttgaatc tagacataga 104820  
tgcggaagaa cggtagaaac tatacgaat aaatattcag agtcctctaa ttgatcaaga 104880  
gtaactattg acttaatagg catcatttat ttagtattaa atgacgaccg taccagtgc 104940  
ggatatacaa aacgatttaa ttacagagtt ttcagaagat aattatccat ctaacaaaaa 105000  
ttatgaaata actcttcgtc aaatgtctat tctaactcac gttaacaacg tggtagatag 105060  
agaacataat gccccgtag tgcctctcc agaggaaata tcctcacaac ttaatgaaga 105120  
tctatttcca gatgatgatt caccggccac tattatcgaa cgagtacaac ctcatctac 105180  
tattattgac gatactccac ctccactggt tcgtagagag ttattaatat cggaacaacg 105240  
tcaacaacga gaaaaaagat ttaataattac agtatcgaaa aatgctgaag caataatgga 105300  
atctagatct ataataactt ctatgccaac acaaacacca tccttgggag tagttttatga 105360  
taaagataaa agaattcaga tgtagagga tgaagtgggt aatcttagaa atcaacgatc 105420  
taatacaaaa tcactctgata atttagataa ttttaccaaa atactatttg gtaagactcc 105480  
gtataaatca acagaagtta ataagcgtat agccatcgtt aattatgcaa atttgaacgg 105540  
gtctccctta tcagtcgagg acttggatgt ttgctggag gatgaaatag atagaatcta 105600  
taaacgatt aaacaatc acgaaagtag aaacgaaaa attatcgtca ctaacgtgat 105660  
tattattgtc ataataatta tcgagcaggc attgctaaaa ctccgatttg aagaaatcaa 105720  
aggactgagt accgatatca cttcagaaat tatcgatgtg gagatcggag atgactgcga 105780  
tgctgtagca tcaaaactag gaatcggtaa cagtcgggtt cttaaatattg tattgtttat 105840  
actcaagata ttctgtaaac gaattaaaat tatttaattt aatacattcc catatccaga 105900  
caacaatcgt ctggattaat ctgttcctgt cgtctcatc cggacgacat attaactttt 105960  
ttattagtgg gcactctttt agatggtttc tttttcccag cattaactga gtcgatacct 106020  
agaagatcgt gattgatctc tccgaccatt ccacgaactt ctaattggcc gtctctgacg 106080  
gtaccataaa ctattttacc agcattagta acagcttggg caatctgacc atccatcgca 106140  
ttgtacgatg tagttgtgtt tgttctacgt ctaggagcac cagaagtatt tttggagccc 106200  
ttggatgttg atgtagaaga agacgaggat tttgattttg gtttacctgt aatacatttt 106260  
gaactccttg attttgtatc acatgcgccg gcagtcacat ctgtttgaga attaagatta 106320  
ttgttgcttc ctttgacggc tgcactcca ccgatttgcg ctagttagatt ttttaagctgt 106380  
gggtgaaatc tattaactgt ttcatataa tcacgtgaac tgcttctaac ggctaaattt 106440  
tttttatccg ccathtagaa gctaaaaata tttttattta tgcagaagat ttaactagat 106500  
tatacaatga actaatatga tccttttcca gattatttac aaacttggta ttttttggtt 106560

-continued

---

ctggaggagg cgaatttaaa ttcggacttg gattcggatt ttgtaagttc ttgatcttat 106620  
tatacatcga gtataggatg gcgacagtaa ctgctacaca aataccgatc aaaagaagaa 106680  
taccaatcat ttattgacaa taacttccact attgatcaag tatgcaatat atcatctttt 106740  
cactaaataa gtagtaataa tgattcaaca atgtcgagat atatggacga taataattta 106800  
gttcatggaa atatcgctat gattggtgtg aatgactccg ctaactctgt ggggtgcgca 106860  
gtgctttccc cacatagaat aaattagcat tccgactgtg ataataatac caagtataaa 106920  
cgccataata ctcaataact tccatgtacg agtgggactg gtagacttac taaagtcaat 106980  
aaaggcgaag atacacgaaa gaatcaaaag aatgattcca gcgattagca cgccggaaaa 107040  
ataatttcca atcataagca tcatgtocat ttaactaata aaaattttaa atcgccgaat 107100  
gaacaaagtg gaatataaac catataaaaa caatagtttg tactgcaaaa ataatatcta 107160  
tttttgtttt cgaagatagtg gtaaaattaa atagtagtac acagcaggtt ataactaaca 107220  
gcagcaacgg ctcgtaatta cttatcattt actagacgaa aaggtggtgg gatattttct 107280  
tgctcaaata atacgaatat atcaccatc cattttatgc gatgtttata tactctaate 107340  
tttaatagat ctatagacga cgggtttacc aacaatatag attttatcga ttcataat 107400  
ttaaacctt ccttaaacgt gaatgatcta ttatctggca taacgatgac cctacctgat 107460  
gaatcggaca atgtactggg ccatgtagaa taaattatca acgaattatc gtctacgaac 107520  
atztatatca tttgttttaa ttttaggacg cgaataaatg gatataaaat agaaaataac 107580  
agatattaca accagtgtta tggccgcgcc caaccaggtg ggcagtttta ttttatcttt 107640  
tactacaggt tctcctggat gtacgtcacc aacggcggac gtagttctag tacaattaga 107700  
cgtaagttcc gcttgggaat ttttaacgc taaagagtta acgttaatcg tacaccaac 107760  
gtatttcat ctagtctttt gaacatcttg attataatat aaccatttct tatctctaga 107820  
ttcgtcggtg cactcatgta accaacatac cctaggtcct aaatatttat ctccggaatt 107880  
agattttgga taattcgcgc accaacaatt tctatttctt ttatgatcgt taaaaagac 107940  
gtataatgcc gtatcccaa aagtaaaata atcaggacga ataattctaa taaactcaga 108000  
acaatatctc gcattccat gtttgagca aatatcgaa taagtagaca tagccggttt 108060  
cgttttgca cgtaaccatt ctaacaatt ggggtttcca ggatcgttcc taaaaatcc 108120  
agtcatgaaa tcatcacaat gttctgtctt gtaattatta ttaaatattt ttggacagtg 108180  
tttggtattt gtcttagaac aacattttgc tacgctatca ctatgcccc ggagataatc 108240  
cttttttata aaatgacatc gttgcccga tgctatataa tcagtagcgt gttttaaatc 108300  
cttaatatat tcaggagtta cctcgttctg ataatagatt aatgatccag gacgaaattt 108360  
gaaagaacta catggttctc catgaattaa tacatattgt ttagcaaat caggaactat 108420  
aaaactacta caatgatcta tcgacatacc atctatcaaa caaaacttgg gtttaatttc 108480  
tcccggagat gtttcataat agtacgtata actttcttct gcaaaactta cagctctatt 108540  
atattcagga taattaaaac ctaattccat atattgtct cgtatatctg ctattcctgg 108600  
tgctattttg attctattaa gagtaacagc tgccccatt ctttaataatc gtcagtattt 108660  
aaactgtaa atgttggtat atcaacatct accttatttc ccgcagtata aggtttgttg 108720  
caggtatact gttcaggaat ggttacattt atacttcttc tatagtcctg tctttcgatg 108780  
ttcatcacat atgcaaagaa cagaataaac aaaataatgt aagaaataat attaaatate 108840  
tgtgaattcg taaatacatt gattgccata ataattacag cagctacaat acacacaata 108900  
gacattccca cagtgttgc attacctcca cgatacattt gagttactaa gcaataggtta 108960

-continued

---

ataactaagc tagtaagagg caatagaaaa gatgagataa atatcatcaa tatagagatt 109020  
agaggagggc tatatagagc caagacgaac aaaatcaaac cgagtaacgt tctaacaatca 109080  
ttatTTTTga agattcccaa ataatcattc attcctccat aatcgTTTTg catcatacct 109140  
ccatctttag gcataaacga ttgctgctgt tcctctgtaa ataaatcttt atcaagcaact 109200  
ccagcaccog cagagaagtc gtcaagcata ttgtaatac ttaaataact catttatata 109260  
ttaaaaaatg tcactattaa agatggagta taatctttat gccgaactaa aaaaaatgac 109320  
ttgtggTcaa ccctaagtc tttttaacga agacggggat ttcgtagaag ttgaaccggg 109380  
atcatccttt aagtttctga tacctaaggg attttacgcc tctcctccg taaagaogag 109440  
tctagtattc gagacattaa caacgaccga taataaaatc actagtatca atccaacaaa 109500  
tgcgccaaag ttatatctc ttcaacgcaa agtcgtatct gaagtagttt ctaatatgag 109560  
gaaaatgatc gaatcaaac gtcctctata cattactctt cacttggcgt gtggatttgg 109620  
taagactatt accacgtgtt atcttatggc tacacacggt agaaaaaccg tcatttgcgt 109680  
acccaataaa atgttaatac atcaatggaa gacacaggta gaggcagtcg gattggaaca 109740  
taagatatcc atagatggag taagtagtct attaaaggaa ctaaagactc aaagtccgga 109800  
tgtattaata gtagtcagta gacatctgac aaacgatgcc ttttgtaaat atatcaataa 109860  
gcattatgat ttgttcactc tggatgaatc acatacgtat aatctgatga acaatacagc 109920  
agttacaaga tttttagcgt attatcctcc gatgatgtgt tattttttaa ctgctacacc 109980  
tagaccagct aaccgaatTT attgtaacag tattattaat attgccaaGT tatccgatct 110040  
aaaaaaaaact atctatgcag tagatagttt ttttgagcca tattccacag acaatattag 110100  
acatatgata aaacgattag atggaccatc taataaatat catatatata ctgagaagtt 110160  
attatctgta gacgagccta gaaatcaact tattcttaat accctggtag aagaattcaa 110220  
gtcaggaact attaatcgca ttttagttat tactaaacta cgtgaacata tggattctt 110280  
ctacaaacga ttattagatc ttttcggacc agaggttgta tttataggag acgcccacaa 110340  
tagacgtact ccagatatgg tcaaatcaat caaggaacta aatagattta tattcgtatc 110400  
caccttattt tattccggta ctggtttaga tattcctagt ttggattcgt tgttcatttg 110460  
ctcggcagta atcaacaata tgcaaataga gcaattacta gggagggat gtcgagaaac 110520  
agaactatta gataggacgg tatatgtatt tcctaacaca tccatcaaag aaataaagta 110580  
catgatagga aatttcatgc aacgaattat tagtctgtct gtagataaac taggatttaa 110640  
acaaaaaagt tatcggaac atcaagaatc cgatcccact tttgtatgta caacatcctc 110700  
cagagaagaa cgtgtattaa atagaatatt taactcgcaa aatcgTTaag aagtttaagc 110760  
gacgatccgc atgctgcgca ggccagtgta ttaccctca tagtattaat ataatccaat 110820  
gatacttttg tgatgTcgga aatcttaacc aatttagact gacaggcaga acacgtcatg 110880  
caatcatcat cgtcatcgat aactgtagtc ttgggcttct ttttgcggct cttcattccg 110940  
gaacgcacat tggTgctatc catttaggta gtaaaaata agtcagaata tgcctatag 111000  
cacgatcgtg caaaacctgg tatatcgtct ctatctttat cacaatatag tgtatcgaca 111060  
tttttattat tattgacctc gtttatcttg gaacatggaa tgggaacatt tttgttatca 111120  
acggccatct ttgcctaat tccagatgtt gtaaaattat aactaaacag tctatcatcg 111180  
acacaaatga aattcttTgt tagacgtttg tagtttacgt atgcggctcg ttcgctctc 111240  
atTTTTcag atattgcagg tactataata ttaaaaaataa gaatgaaata acataggatt 111300

-continued

---

aaaaataaag ttatcatgac ttctagcgct gattttaaacta actttaaaga attacttagt 111360  
ctgtacaaaa gtttgagatt ttcagattct gcggctatag aaaagtataa ttctttggta 111420  
gaatggggaa catctactta ctggaaaata ggcgtgcaaa aggtagctaa tgtcgagacg 111480  
tcaatatctg attattatga tgaggtaaaa aataaacctg ttaatattga tccgggctat 111540  
tacattttct taccggata ttttgggagc gtctttatct attcgaaggg taaaaatag 111600  
gtagaacttg gatctggaaa ctcttttcaa ataccagatg atatgcgaag tgcgtgtaac 111660  
aaagtattag acagcgataa cggaatagac tttctgagat ttgttttggt aaacaataga 111720  
tggataatgg aagatgctat atcaaaatat cagctctccag ttaatattt taaactagct 111780  
agtgagtacg gattaaacat acccaaatat ttagaaattg aaatagagga agacacatta 111840  
tttgacgaca agttatactc tattatagaa cgctcttctg atgataaatt tccaaaaata 111900  
tccatctcgt atattaagtt gggagaactt agacggcaag ttgtagactt tttcaaatc 111960  
tcattcatgt atattgagtc catcaaggta gatcgtatag gagataatat ttttattcct 112020  
agcgttataa caaaatcagg aaaaaagata ttagttaaag atgtagacca ttaatacga 112080  
tccaaggtta gagaacatac atttgtaaaa gtaaaaaaga aaaacacatt ttccatttta 112140  
tacgactatg atggaaacgg aacagaaact agaggagaag taataaaacg aattatagac 112200  
actataggac gagactatta tgttaacgga aagtatctct ctaaggttgg tagtgcaggc 112260  
ttaaagcaat tgactaataa attagatatt aatgagtgcg caactgtcga tgagttagtt 112320  
gatgagatta ataaatcgg aactgtaaaa cgaaaaataa aaaaccaatc agcatttgat 112380  
ttaagcagag aatgtttggg atatccagaa gcggatttta taacgtagt taataacatg 112440  
cggttcaaaa tagaaaattg taaggttgta aatttcaata ttgaaaatac taattgttta 112500  
aataaccoga gtattgaaac tatatatgga aactttaacc agttcgtctc aatctttaag 112560  
tcgtcaccga tgtcaaaaaa agattattcg agtgaataa tatgcgcctt tgatataggt 112620  
gcaaaaaatc ctgccagaac tgttttagaa gtcaaggata actcggtag ggtatggata 112680  
tatcaaaaat tagactggag ttctgattgg gaaaggcgca tagctaaaga tttgtcaca 112740  
tatgaataca ctacagttct tctagaacgt cagcctagaa ggtcgcgta ttttaaattt 112800  
atctatttta ttaaaggctt tttatatcat acatcggctg ccaaagtat ttgcgtctcg 112860  
cctgtcatgt ctggtaatc atatagagat cgaaaaaga gatcggctga agcatttctt 112920  
gattggatgg acacattcgg attgcgagac tccgttccgg atagacgcaa attagacgat 112980  
gtagcggata gtttcaattt ggctatgaga tacgtattag ataaatggaa tactaattat 113040  
acaccttata atagggtgaa atctagaaat tacataaaaa aaatgtaata acgtagtaa 113100  
cgccattatg gataatctat ttaccttct acatgaaata gaagatagat atgccagaac 113160  
tatttttaac tttcatctaa taagttgcga tgaaatagga gatatatatg gtcttatgaa 113220  
agaacgcatt tcctcagagg atatgtttga taatatagtg tataataaag atatacatcc 113280  
tgccattaag aaactagtgt attgcgacat ccaacttact aaacacatta ttaatcagaa 113340  
tacgtatcgg gtatttaacg attcttcaaca agtgaatgt tgcattatt tcgacataaa 113400  
ctcagataat agcaatatta gctctcgtac agtagagata tttgagaggg aaaagtcac 113460  
tcttgatca tatattaaaa ctaccaataa gaagagaaag gtcaattacg gcgaaataaa 113520  
gaaaactgtt catggaggca ctaatgcaaa ttacttttcc ggtaaaaagt ctgacgagta 113580  
tctgagtact acagttagat ccaacattaa tcaaccttg atcaaaaacca tttctaagag 113640  
aatgagagta gatatcatta atcactctat agtaacgcgt ggaaaaagct ctatattaca 113700

-continued

---

aactatagaa attatnttta ctaatagaac atgtgtgaaa atattcaagg attctactat 113760  
gcacattatt ctatccaagg acaaggatga aaaggggtgt atacacatga ttgacaaatt 113820  
attctatgtc tattataaatt tatttctggt gtccgaagat atcatccaaa acgagtactt 113880  
taaagaagta gctaatgttg taaaccacgt actcacggct acggcattag atgagaaatt 113940  
attcctaatt aagaaaatgg ctgaacacga tgtttatgga gttagcaatt tcaaaatagg 114000  
gatgtttaac ctgacattta ttaagtcggt ggatcatacc gttttcccct ctctgttaga 114060  
tgaggatagc aaaataaagt tttttaaggg gaaaaagctc aatattgtag cattacgatc 114120  
tctggaggat tgtataaatt acgtgactaa atccgagaat atgatagaaa tgatgaagga 114180  
aagatcgact attttaaaata gcatagatat agaaacggaa tcggtagatc gtctaaaaga 114240  
attgcttcta aaatgaaaaa aaacactgat tcagaaatgg atcaacgact cggatataag 114300  
tttttggtgc ctgatcctaa agccggagtt ttttatagac cgttacattt ccaatatgta 114360  
tcgtattcta attttatatt gcatcgattg catgaaatct tgaccgtcaa gcggccactc 114420  
ttatcgttta agaataatac agaacgaatt atgatagaaa ttagcaatgt taaagtgact 114480  
cctccagatt actcacctat aatcgcgagt attaaaggta agagttaga cgcattagcc 114540  
acgttcactg taaatatcct taaagaggta atgaccaaag agggatatc catcactaaa 114600  
ataagtagtt atgagggaaa agattctcat ttgataaaaa ttccgctact aataggatac 114660  
gggaataaaa atccacttga tacagccaag tatctgttc ctaatgtcat aggtggagtc 114720  
tttatcaata aacaatctgt cgaaaaagta ggaattaatc tagtagaaaa gattacaaca 114780  
tggccaaaat ttagggttgt taagccaaac tcattcactt tctcgttttc ctccgtatcc 114840  
cctcctaag tattaccgac aagatatcgc cattacaaga tatctctgga tatatcacia 114900  
ttggaagcgt tgaatatatc atcgacaaag acatttataa cggccaatat tgttttgctg 114960  
tctcaatatt tatctagagt gagtctagaa ttcattagac gtagtttate atacgatatg 115020  
cctccagaag ttgtctatct agtaaacgca ataatagata gtgctaaacg aattactgaa 115080  
tctattactg actttaatat tgatacatac attaatgacc tgggtggaagc tgaacacatt 115140  
aaacaaaaat ctcagttaac gataaacgag ttcaaatatg aaatgctgca taacttttta 115200  
cctcatatga actatacacc cgatcaacta aagggatttt atatgatatc tttactaaga 115260  
aagtttctct actgtatcct ccacacttct agatatccag atagagatc gatggtttgt 115320  
catcgcatcc taacgtacgg caaatatctt gagacgttgg cacatgatga attagagaat 115380  
tacataggca acatccgaaa cgatatcatg aacaatcaca agaacagagg cacttacgcg 115440  
gtaaacattc atgtactaac aactcccgga cttaatcatg cattttctag tctattgagt 115500  
ggaaagttca aaaagtcaga cggtagttat cgaacacatc ctcactatc atggatgcag 115560  
aatatttcta ttcctaggag tgttgattt tatccggatc aagtaaagat ttcaaagatg 115620  
ttttctgca gaaaaatcca tccaagtcaa tatctttact tttgttcac agacgttccg 115680  
gaaagaggtc ctcaggtagg tttagtatct caattgtctg tcttgagttc cattacaaat 115740  
atactaacgt ctgagtattt ggatttgga aagaaaattt gtgagtatat cagatcatat 115800  
tataaagatg atataagtta ctttgaaca ggatttcaa tcaatataga aaatgctcta 115860  
gtcgcactc ttaatccaaa tatgatatgt gatctttaa ctgacttag acgtagaaaa 115920  
cggatgggat tcttcgtaa cttggaggta ggtattactt tagttaggga tcacatgaat 115980  
gaaattcgca ttaatttgg agcgggaaga ttagtcagac cattcttgggt tgtggataac 116040

-continued

---

ggagagctca tgatggatgt gtgtccggag ttagaaagca gattagacga catgacattc 116100  
tctgacattc agaagaggtt tccgcatgtc atcgaaatgg tagatataga acaatttact 116160  
tttagtaacg tatgtgaatc ggttcaaaaa tttagaatga tgtcaaagga tgaagaaaag 116220  
caatacgatt tatgtgaact tctgcccga ttagagatg gatatgtagc atcttacta 116280  
gtgggaatca atcacaattc tggaccaga gctattcttg gatgtgctca agctaaacaa 116340  
gctatctctt gtctgagctc ggatatacga aataaaatag acaatggaat tcatttgatg 116400  
tatccagaga ggccaatcgt gattagtaag gctttagaaa cttcaaagat tgcggcta 116460  
tgcttcggcc aacatgttac tatagcatta atgtcgtaca aaggatcaa tcaagaggat 116520  
ggaattatca tcaaaaaaca atttattcag agaggcggtc tcatatagt taccgccaag 116580  
aaacatcaag tagaaattcc attgaaaaac ttaataaca aagaaagaga taggtcta 116640  
gcctattcaa aattagaag taatggatta gttagactga atgcttctt ggaatccgga 116700  
gacgctatgg cacgaaatc ctcacaaaga actcttgaag atgattttgc tagagataat 116760  
cagattagct tcatgtttc cgagaaatc accgatatg acaaatctcg cgttgaacga 116820  
gtacaagtag aacttactga caaagttaag gtacgagat taaccatgaa agaaagaaga 116880  
cccattctag gagacaaatt taccactaga acgagcaca agggacagc cgcgtatgtc 116940  
gcgatgaaa cggaaactcc atacgacga aatggtatca caccagatg cattattaat 117000  
tctacatcca tcttctctag aaaaactata tctatgttga tagaagtat ttaacagcc 117060  
gcatattctg ctaagccgta caacaataag ggagaaaacc gacctgtctg ttttctagt 117120  
agtaacgaaa catccatcga tacatatatg caattcgtc aacaatgta tgagcattca 117180  
aatccgaaat tgtctgatga agaattatc gataaaatc tttgtgaaa gatttctat 117240  
gatcctgaaa cggataagcc ttatgcatcc aaagtattt ttggaccaat ttattactg 117300  
cgtctgaggc atttaactca ggacaaggca accgtagat gtagaggtaa aaagacgaag 117360  
ctcattagac aggcgaatga gggacgaaa cgtggaggag gtatcaagtt cggagaaatg 117420  
gagagagact gtttaatagc gcatggcgca gccaaacta ttacagaagt tttgaaagat 117480  
ttggaagaag attatcaaga tgtgtatgtt tgtgaaaatt gtggagacat agcagcaca 117540  
atcaagggta ttaatacatg tcttagatg tcaaaacta atctctctc tctcttaaca 117600  
aaaattgata ccacacacgt atctaaagta tttcttactc aatgaacgc cagaggcgt 117660  
aaagtcaaat tagatttoga acgaaggcct ccttcgtttt ataaccatt agataaagt 117720  
gatctcaaac cgtcttttct ggtgtaatat tctagtttag tagtagatc atatcaat 117780  
catcaaatc gagatccgaa ttataaaatg ggcgtggatt gttactata gaatcggacg 117840  
tctgatattc gaaaatctgt ggagttcag gtttgggtg aggtgtaact gctactggg 117900  
atactgaagt ctgatattca gaaagctgtg gatgttctg ttcgacatcc accgatggg 117960  
tcacaccact actaattggt tcagtaacgt ctgtggacga tggagggtc acttctacag 118020  
aacctgtagc ctcagttgtc aacggagata cattttta 118080  
gtaatggttt ctcagttgga tctgaagaag aggtaagata tctactaga agataccgat 118140  
cacgttctag ttctctttg tagaactta cttttctt ctcgcatct agttgatatt 118200  
ccaacctct cagttacta cgttcagatt ccaattcag ttcgcatggg ttacctccg 118260  
agtttttacg agcagattca cgttcagcct tcatgctct ctccttctct ctatcgagt 118320  
tatcagagca gtctttctga agcgatcga actccataa tttctcaac gctttgattg 118380  
tttccataga tttccgaagt tcagcttta gactgtgat tcttttct tcaattcac 118440

-continued

---

agctggatgt acaacegttt ccattaccgc catctctaag tttcttttct agatcggcaa 118500  
catttcatcc ccattgccttt tacattcctc gagtctactg tegtctgaaat atcgttccag 118560  
ctccttttctg acatcaataa ctttagcacg ttgtctctca agctctcttt tgtagttatc 118620  
tgattccctg gcaegtttaa gatcttcatg caattgagtc agctcttaac ttcctctctt 118680  
gcttctctctg catagtactt acaatcacta tgggatccat tgttaccacg tctacactcg 118740  
gcgagctcgc gtttaagaga ttcaatttcc cgtttgtatt ggtccatggt tccattgcta 118800  
ccaccattag atttacaggc tgctagttgt cgttcgagat cagaaatagc ggttttcttg 118860  
gaattgattt cgtcagtgta cttggcatcg aaacacttat taagttcttt ttccaattct 118920  
acgattttat ttctttcgcg agtcaattcc ctctgtagt aactatctgt tttgtcagat 118980  
tcacgctctc tacgtagact ttcttgcaag ttactaattt gttccctagc acgtccgagt 119040  
ttagttttat atgctgaata gagttctgat tcctccttg agcagatctc tagcgatcgt 119100  
ttaagattcc tgattctagt ctttagccta tttacctcct cagaagatgt tccgttaccg 119160  
ttgcgtttac actcgttaag ctgtctatca agatccatga ttctatctct aagacgttgc 119220  
atctctcttt ccatatcagc attgcttca ttattacgtc tgcagtcact caactgtctt 119280  
tcaatatctg agattctatc tctaagacgt cgcctctctc tctgtttcgg cattggtttc 119340  
attattacgt ctacagtcgt tcaactgtct ttcaagatct gatattctag attggagtct 119400  
gctaactctc gtagcatttt cacggcattc actcagttgt ctttcaagat ctgaaatttt 119460  
agattggagt ctgctaactc ctgtaagatt tctctctcgc ctctcagtc agtcogtcaa 119520  
cttattctct agttctctaa tacgcgaacg cagtgcatca acttcttgcg tgtcttctcg 119580  
gttgcgtgta cattcatcga gtctagattc gagatctcta acgcgctcgc gttcttctc 119640  
aagttctctg cgtactacag aaagcgtgtc cctatcttgt tgatatttag caatttctga 119700  
ttctagagta ctgattttgc ttacgtagtt actaatagtt gtcttggcct tatcaagatc 119760  
ctccttctat ttgtcgcatt ccttgatctc cctacgaagt ctggacagtt cccattcagc 119820  
attacgacgt ttatcgattt cagctcggag atcgtcctcg cgttggttta gccacatacg 119880  
actgagttca agttctcgtt gacaagatcc atctactttt ccattcctaa tagtatccag 119940  
ttccttttct agttctgaac gcatttctcg ttccctatca agcgattctc tcaattctcg 120000  
gatagtcttc ttatcaattt ctaataaatc tgaacctca tctgtcccat tttgaatctc 120060  
cctgtgttct ttgatctctt ttgtaagtcg gtcgattctt tcggttttat aaacagaatc 120120  
cctttccaaa gtcctaactc tactgagttt atcactaagt tctgcattca attcggtag 120180  
ttttctcttg gcttcttcca actctgtttt aaactctcca ctatttccgc attcttctc 120240  
gcatttatct aaccttcaa ttagtttatt aataactagt tggtaatcag cgattcctat 120300  
agccgttctt gtaattgtgg gaacataatt aggatctct aatggattgt atggcttgat 120360  
aactcgtga ataattgttc tatgttttct actgatgcat gtatttgctt cgattttttt 120420  
atcccatggt tcactctatca tagatttaaa cgcagtaatg ctgcacaatc taacatcttg 120480  
aacggttggg acaattcogt tccataaatt tataatgttc gccatttata taactcattt 120540  
tttgaatata cttttaatta acaaaaagag taagtactc atatggacgc cgtccagtct 120600  
gaacatcaat ctttttagcc agagatatca tagccgctct tagagtttca gcgtgatttt 120660  
ccaacctaaa tagaacttca tcgttgctgt tacaacactt ttctatttgt tcaaactttg 120720  
ttgttacatt agtaactctt ttttccaaat tagttagcgc ttgtttgaga gtttccctat 120780

-continued

---

tgtcgtcttc atcggcttta acaattgctt cgcgtttagc ctctggcttt ttagcagcct 120840  
ttgtagaaaa aaattcagtc gctggaattg caagatcgtc atctccgggg aaaagagttc 120900  
cgtccattta aagtacagat tttagaaact gacctctgc gttatttata tttggtacaa 120960  
cacatggatt ataaatattg atgttaataa catcagaaaa tgtaaagtct atacattggt 121020  
gcatcgtggt aaattttcta atggatctag tattattggg tccaacttct gcctgaaatc 121080  
caaatatgga agcggataca aaaccgttcc ctggataaac cacacatctc cacttttget 121140  
ttacatcaga aattgtgtcg ttgacatctt gaactctct atctaagcc ggtgttccac 121200  
ctatagattt tgaatattcg aatgctgcat gagtagcatt aaattcetta atattgccat 121260  
aaatttcata tattgagtaa cctggataa aaagtaaaaa caccgcagcc gtcgctacca 121320  
caataaaaaa aattgataga gagttcattt ataacttatt agaagctgac aaaatTTTT 121380  
tacacgcac agacaatgct ttaataaata gttcaacatc tacttttgtc atacgaacc 121440  
gatggtatga ttctaacct gaattacatc cgaaaaagt gactatgttc atagtcatta 121500  
agtcattaac aaacaacatt ccagactctg gattataaga cgatactggt tcgtcacaat 121560  
tacctacctt aatcatgtga ttatgaatat tggctattag agcaccttct aagaaatcta 121620  
taatatcttt gaaacacgat ttaaaatcaa accacgaata tacttctacg aagaaagtta 121680  
gtttaccat aggagaaata actataaatg gagatctaaa taaaaatcc ggatctatga 121740  
tagttttaac attattatat tctctattaa atacctccac atctaaaaat gttaattttg 121800  
aaactatgtc ttcgtttatt accgtaoctg aactaaacgc tataagctct attgtttgag 121860  
aactctttaa acgatattct tgaatacat gtaacaaagt ttcctttaa tcggtcgggt 121920  
tatctacat agttacagaa tttgtatcct tatctataat ataataatca aaatcgtata 121980  
aagttatata attatcogt tcagattggg atcttttcaa atagactaaa aacccattt 122040  
ctctagtaag tatcttatgt atagtttgt aaaatctct catggtggga atagctcta 122100  
cgcagttag ccattctca ttgacagcgg tagatgtatt agacaaaact attccaatgt 122160  
ttaacaaggg ccattttac agattattaa atccttgtt gataaatgta gccaatgagg 122220  
gttcgagtc aacgacgatt gaattctct cccgcggatg ctgcatgatg aacgacggga 122280  
tggtgtcga ttgatttga attcttttc gacttttgt ttatattaa tattttaaa 122340  
tttatagcgg atagcaatc atgtaccacg gataatgtag acgcgtattg cgcacgata 122400  
tctttattat tagataaatt tatcaataaa tgtgagaagt ttgcctcgtt aaggcttcc 122460  
atttaaat atataaaca tttgtgttg tatcttctc gtcttttatg gaatagttt 122520  
ttactagtaa agctgcaatt acacactttg tccgtaaac ataaatata acaccagctt 122580  
ttatcaatcg tccaaaaag tcgacggcgg acattttta catggcatct attttaata 122640  
cacttaggtt tttggaaaa acatcatttt ataattgtaa cgattcaata actaaagaaa 122700  
agattaagat taaacataag ggaatgtcat ttgtattta taagccaaag cattctaccg 122760  
ttgttaaata cttgtctgga ggaggtatat atcatgatga tttggttga ttgggaagg 122820  
taacaattaa tgatctaaag atgatctat tttacatgga tttatcatat catggagtga 122880  
caagtagtgg agcaatttac aaattgggat cgtctatcga tagacttct ctaaatagga 122940  
ctattgttac aaaagttaat aattatgatg atacatttt tgacgacgat gattgatcgc 123000  
tattgcacaa tttgttttt gtactttcta atagtggt taggttcttt ttcatatgag 123060  
aatattgatt tactaaaata tcgatgtta actttgttc tataacgtcc ttatcggcgg 123120  
tatcggtaac tatacgaat tcacctcac aaaatcggga gtcttcgata ataatagcca 123180

-continued

---

atcgattatt ggatctagct gtctgtatca tattcaacat gtttaataata tectttogtt 123240  
ttccctttac aggcacatgat cgtagcatat tttccgcgct tgagatggaa atgttaaaac 123300  
tacaanaatg cgtaatgtta gcccgtocta atattggtag gtgtctataa gtttggeata 123360  
gtagaataat agacgtgttc aaatgccttc cgaagttaa gaattctatt agagtattgc 123420  
atattgatag tttatcgctt acatcatcaa aaataagtaa aaagtgtgct gattttttat 123480  
gattttgtgc gacagcaata catttttcta tgttactttt agttcgtatc agattatatt 123540  
ctagagattc ctgactacta acgaaattaa tatgatttgg ccaaatgtat ccatcataat 123600  
ctgggttata aacgggtgta aacaagaata tatgtttata ttttttaact agttagataa 123660  
acagagatag taaatagata gtttttccag atccagatcc tcccgtaaa accattctaa 123720  
acggcatttt taataaattt tctcttgaat attgttttct ttggaaacaa ttcataatta 123780  
tatttacagt tactaaatta atttgataat aaatcaaaat atggaaaact aaggttgtta 123840  
gtaggaggga gaacaaagaa ggcacatcgt gacataaata acatttatta tcatgatgac 123900  
accagaaaac gacgaagagc agacatctgt gttctccgct actgtttacg gagacaaaat 123960  
tcaggaaaag aataaacgca aacgcgtgat tggctatgt attagaatat ctatggttat 124020  
ttcactacta tctatgatta ccatgocagc gtttctcata gtgcgcctaa atcaatgcat 124080  
gtctgctaac gaggtgcta ttactgacgc cgctgttgc gttgctgctg catcatctac 124140  
tcatagaag gttgctcta gcactacaca atatgatcac aaagaaagct gtaatggttt 124200  
atattaccag ggttcttgtt atatattaca ttcagactac cagttattct cggatgctaa 124260  
agcaaatgc actcgggaat catcaacact acccaataaa tccgatgtct tgattacctg 124320  
gctcattgat tatgttgagg atacatgggg atctgatggt aatccaatta caaaaactac 124380  
atccgattat caagattctg atgtatcaca agaagttaga aagtattttt gtgttaaac 124440  
aatgaactaa tatttatttt tgtacattaa taaatgaat cgcttaatag acaaaactgta 124500  
agtaggttta agaagtgtc ggtgccggcc gctataatga tgatactctc aaccattatt 124560  
agtggcatag gaacatttct gcattacaaa gaagaactga tgccatagtc ttgcgccaat 124620  
ggatggatc aatacgataa acattgttat ttagatacta acattaaaa gtctacagat 124680  
aatgcggttt atcagtgctg taaattacga gccagattgc ctgaccgga tactagacat 124740  
ctgagagtat tgttttagtat tttttataaa gattattggg taagtttaaa aaagaccaat 124800  
aataaatggt tagatattaa taatgataaa gatatagata ttagtaaat acaaaatttt 124860  
aaacaactaa acagtacgac gtagtctgaa gcgtgttata tatacaagtc tggaaaactg 124920  
gttaaaacag tatgtaaaag tactcaatct gtactatgtg ttaaaaaatt ctacaagtga 124980  
caacaaaaaa tgaattaata ataagtcgtt aacgtacgcc gccatggacg ccgctttgt 125040  
tattactcca atgggtgtgt tgactataac agatacattg tatgatgatc tcgatatctc 125100  
aatcatggac tttataggac catacattat aggtaacata aaaactgtcc aaatagatgt 125160  
acgggatata aaatattcgc acatgcaaaa atgctacttt agctataagg gtaaaatagt 125220  
tctcaggat tctaattgatt tggctagatt caacatttat agcatttgtg ccgcatacag 125280  
atcaaaaaat accatcatca tagcatgcca ctatgatatc atgttagata tagaagataa 125340  
acatcagcca tttatctat tccatctat tgatgttttt aacgctacaa tcatagaagc 125400  
gtataacctg tatacagctg gagattatca tctaactatc aatccttcag ataactgaa 125460  
aatgaaattg tcttttaatt ctctattctg catatcagac ggcaatggat ggatcataat 125520

-continued

---

tgatgggaaa tgcaatagta attttttattc ataaaagttg taaagtaaat aataaaacaa 125580  
taaatattga actagtagta cgtatattga gcaatcagaa atgatgctgg tacctcttat 125640  
cacggtgacc gttagttcgg gaacaatatt agtatgttat atattatata tttgtaggaa 125700  
aaagatacgt actgtctata atgacaataa aattatcatg acaaaattaa aaaagataaa 125760  
gagttcctaat tccagcaaat ctagtaaatc aactgatagc gaatcagact gggaggatca 125820  
ctgtagtgtc atggaacaaa acaatgacgt agataatatt tctaggaatg agatattgga 125880  
cgatgatagc ttcgctggta gtttaatatg ggataacgaa tccaatgtta tggcgcctag 125940  
cacagaacac atttacgata gtgttgctgg aagcacgctg ctaataaata atgatcgtaa 126000  
tgaacagact atttatcaga acaactacgt agtaattaa gaaacggaga ctgttaaagt 126060  
acttaatgaa gataccaaac agaatcctaa ctattcatcc aatcctttcg taaattataa 126120  
taaaaccagt atttgtagca agtcaaatcc gtttattaca gaacttaaca ataaatttag 126180  
tgagaataat ccgttttagc gagcacatag cgatgattat ctttaataagc aagaacaaga 126240  
tcatgaacac gatgatatag aatcatcagt cgtatcattg gtgtgattag tttccttttt 126300  
ataaaattga agtaaatatt agtattattg ctgccgtcac gttgtacaaa tggagatatt 126360  
ccctgtattc ggcatttcta aaattagcaa ttttattgct aataatgact gtagatatta 126420  
tatagataca gaacatcaaa aaattatattc tgatgagatc aatagacaga tggatgaaac 126480  
ggtacttctt accaacatct taagcgtaga agttgtaaat gacaatgaga tgtaccatct 126540  
tattcctcat agattatoga cgattatact ctgtattagt tctgtcggag gatgtgttat 126600  
ctctatagat aatgacatca atgacaaaaa tattctaacc tttcccattg atcatgctgt 126660  
aatcatatcc ccaactgagta aatgtgtcgt agttagcaag ggccctacaa ccatattggt 126720  
tgtaaagcgg gatataccta gcaaacgatt ggtaaacatcg tttacaaacg acatactata 126780  
tgtaaacat ctgtcactga ttaattattt gccgttgtct gtattcatta ttagacgagt 126840  
caccgactat ttggatagac acatatgcga tcagatattt gctaataata agtggatttc 126900  
ccttataaoc atcgacgata agcaatatcc tattccatca aactgtatag gtatgtcctc 126960  
tgccaagtac ataaattcta gcatcgagca agatacttta atccatgttt gtaacctcga 127020  
gcatccgttc gactcagtat acaaaaaaat gcagtcgtac aattctctac ctatcaagga 127080  
acaaatattg tacggtagaa ttgataatat aaatatgagc attagtattt ctgtggatta 127140  
atagatttct agtatgggga tcattaatca tctctaattc ctaaatacct cataaaacga 127200  
aaaaaaaagc tattatcaaa tactgtacgg aatggattca ttctcttctc tttttatgaa 127260  
actctgttgt atatctactg ataaaactgg aagcaaaaaa tctgataaaa agaataagaa 127320  
taagatcaag gattatatgg aacacgatta ttataaata acaatagttc ctggttcctc 127380  
ttccacgtct actagctcgt ggtattatcc acatgcctag taatagtctc tttgctgtga 127440  
cggaaagcag actagaaata acaggctaaa atgttcagac accataatag ttcccaaccc 127500  
agataataac agagtacat caacacattc ctttaaacct aatcccaaac ccaaaaccgt 127560  
taaaatgtat ccggccaatt gatagtagat aatgaggtgt acagcgcagc ataatttaca 127620  
cagtaaccaa aatgaaaaca ctttagtaat tataagaaat atagacggta atgtcatcat 127680  
caacaatcca ataatatgcc tgagagtaaa cattgacgga taaaacaaaa atgctccgca 127740  
taactctatc atggcaataa cacacccaaa tacttgtaa attcctaaat tagtagaaaa 127800  
tacaacggat atcgatgtat aagtgatctc gagaaataat aagaataaag taatgcccgct 127860  
aaagataaac atcaacattg tttggtaatc attaaaccaa ttagtatgaa gttgaactaa 127920

-continued

---

tttcacagta gattttatc cagtgttacc ctccgatgta taagtacctg gtaagatata 127980  
tttatattcc ataataatg agacatcact atccgataac gaatgaagtc tagcactagt 128040  
atgccattta cttaatattg tcgtcttgga agttttatta taagttaaaa tatcatgggt 128100  
atccaatttc catctaatac actttgtcgg attatctata gtacacggaa taatgatggg 128160  
atcattacat gctgtatact ctatggctct tgtagtgtt ataacaacca acgtatagag 128220  
gtatatcaac gatattctaa ctcttgacat tttttattta tttaaaatga tacctttgtt 128280  
atatttttta ttctattttg ctaacgggat tgaatggcat aagtttgaaa cgagtgaaga 128340  
aataatttct acttacttat tagacgacgt attatacacg ggtgttaatg gggcgggata 128400  
cacattttca aataataaac taaacaaaac tggtttaact aataataatt atatacacaac 128460  
atctataaaa gttagaggatg cggataagga tacattagta tgcggaaacca ataacggaaa 128520  
tcccaaatgt tggaaaatag acggttcaga cgaccacaaa catagaggta gaggatagc 128580  
tccttatcaa aatagcaaac taacgataat cagtcacaac ggatgtgtac tatctgacat 128640  
aacatatca aaagaaggaa ttaaacgatg gagaagattt gacggaccat gtgggtatga 128700  
tttattcaag gcggataacg taattccaaa agatgggtta cgaggagcat tcgtcgataa 128760  
agatgggtact tatgacaaag tttacattct tttcactgat actatcggct caaagagaat 128820  
tgtaaaaatt ccgtatatac cacaatgtg cttaaacgac gaaggtgggc catcatcatt 128880  
gtctagtcac agatggtcga cgtttctcaa agtcgaatta gaatgtgata tcgacggaag 128940  
aagttataga caaattatc attctagaac tataaaaaa gataatgata cgatactata 129000  
tgtattcttc gatagtcctt attccaagtc cgcattatgt acctattcta tgaataccat 129060  
taaacatct ttttctacgt caaaattgga aggatataca aagcaattgc cgtctccagc 129120  
tcctgggtata tgtttaccag ctggaaaaat tgttccacat accacgtttg aagtcataga 129180  
acaatataat gtactagatg atattataaa gcctttatct aaccaaccta tcttcgaagg 129240  
accgtctggg gttaaatggg tcgatataaa ggagaaggaa aatgaacatc gggaaatag 129300  
aatatacttc ataaaagaaa attctatata ttcgttcgat acaaaatcta acaaaactcg 129360  
tagctcgcaa gtcgatgccc gactattttc agtaatggta actgccaac cgttatttat 129420  
agcagatata gggataggag taggaatgcc acaaatgaaa aaaatactta aatgtaatc 129480  
ttaatcgagt acaccacacg acaatgaaca aacataagac agattatgct ggttatgctt 129540  
gctgcgtaat atgcggctca attggtggaa ttatttttac agcgacacta ttaaaagttg 129600  
tagaacgtaa attagttcat acaccatcaa tagataaaac gataaaagat gcatatatta 129660  
gagaagattg tcctactgac tggataagct ataataataa atgtatccat ttatctactg 129720  
atcgaaaaac ctggggaggaa ggacgtaatg catgcaaacg tctaaatcca aattcggatc 129780  
taattaagat agagactcca aacgagttaa gttttttaag aagcattaga cgcgatatt 129840  
gggtaggaga atccgaaata ttaaacgaga caaccacata taattttata gctaagaatg 129900  
ccacgaagaa tggaaactaaa aaacggaaat atattttag cacaacgaat actcccaaac 129960  
tgcattcgtg ttacactata taacaattac actacatttt tattcatacc actacttcgg 130020  
tttagatgtt tagaaaaaaa taaatctgc cgtaccgttc ttgtttttat aaaaataaca 130080  
attaacaatt atcaaatttt ttcttaata ttttacgtgg ttgaccatc ttgggtgtaa 130140  
aataatctct tagtggtgga atggaatgct gtttaatgtt tccgactca tcgtatattt 130200  
tgacgtatgc agtcacatcg tttacgcaat agtcagactg tagttctatc atgcttcta 130260

-continued

---

catcagaagg aggaacagtt ttaaagtctc ttggttttaa tctattgccg ttagttttca 130320  
tgaaatcctt tgttttatcc acttcacatt ttaaataaat gtccactata cattcttttg 130380  
ttaattttac tagatcgta tgggtcatag aatttatagg ttcgtagtc catggatcca 130440  
aactagcaaa cttcgcgtat acggtatcgc gattagtgtg tacaccaact gtatgaaaat 130500  
taagaaaaca gtttaataaa tcaacagaaa tatttaatcc tccgtttgat acagatgcgc 130560  
catatttatg gatttcggat tcacacgttg tttgtctgag gtgttcgtct agtgttgctt 130620  
ctacgtaaac ttcgatccoc atatattctt tattgtcaga atcgcatacc gatttatcat 130680  
catacactgt ttgaaaacta aatggatata acatcaaaat aacaataact aacgagtaca 130740  
ttctgcaata ttgttatcgt aattggaaaa atagtgttcg agtgagtggg attatgtgag 130800  
tattggattg tataattttat tttataattt gtaataagaa taaaatgcta atgtcaagtt 130860  
tattccaata gatgtcttat taaaaacata tataataaat aacaatggct gaatggcata 130920  
aaattatcga ggatattctca aaaaaataa agttcggagg tgccgccatc gttgattaca 130980  
agactacaaa gaatgttcta gctgctattc ctaacagAAC atttgccaag attaatccgg 131040  
gtgaaattat tcctctcacc actaatcgtg atattctaaa acctcttatt ggtcagaaat 131100  
attgtattgt atatactaac tctctaattg atgagaacac gtatgctatg gagttgctta 131160  
ctgggtacgc ccctgtatct ccgatcgtta tagcgagaac tcataccgca cttatatttt 131220  
tgatgggtaa gccacaaca tccagacgtg acgtgtatag aacgtgtaga gatcacgcta 131280  
cccgtgtacg tgcaactggt aattaaata aaaagtaata ttcatatgta gtgtcaattt 131340  
taaagatgta tgatgaaatg gataatatcc atattgacga tgtcaataat gccggtattg 131400  
gcatacagtt catcgatttt tagatttcat tcagaggatg tggaattatg ttatgggcat 131460  
ttgtattttg ataggatcta taatgtagta aatataaaat ataaccgca tattccatat 131520  
agatataatt ttattaatcg cacgttaacc gtatagAAC tagacgataa tgtctttttt 131580  
acacatggtt attttttaaa acacaaatat ggttcactta atcctagttt gattgtctca 131640  
ttatcaggaa acttaaaata taatgatata caatgctcag taaatgtatc gtgtctcatt 131700  
aaaaatttgg caacgagtac atctactata ttaacatcta aacataagac ttattctcta 131760  
catcgggtcca cgtgtattac tataatagga tacgattcta ttatatggta taaagatata 131820  
aatgacaagt ataatgacat ctatgatttt actgcaatat gtatgctaag agcgtctaca 131880  
ttgatagtga ccatatacgt gtttaaaaa ataaaaatga actcttaatt atgctatgct 131940  
attagaaatg gataaaatca aaattacggt tgattcaaaa attggtaatg ttgttaccat 132000  
atcgtataac ttgaaaaga taactattga tgtcacacct aaaaagaaaa aagaaaagga 132060  
tgtattatta gcgcaatcag ttgctgtcga agaggcaaaa gatgtcaagg tagaagaaaa 132120  
aaatattatc gatattgaag atgacgatga tatggatgta gaaagcgcgt aatcagatct 132180  
ataaaaaata gtatataata aatacttttt atttactgta ctcttactgt gtagtgggtg 132240  
taccctactc gattattttt taaaaaaaa atacttattc tgattcttct aaccatttcc 132300  
gtgttcgctc gaatgccaca tcgacgtcaa agatagggga gtagttgaaa tctagtctctg 132360  
cattgttggg acgcacctca aatgtagtgt tggatatctt caacgtatag ttgttgagta 132420  
gtgatgggtt tctaaataga attctcttca tatcattctt gcacgcgtac atttttagca 132480  
tccatcttgg aattctagat cctgttctta tcccattgg tttcatcaat agaagattaa 132540  
acatatcgtg cgaacacgat ggagagtaat cgtagcaaaa gtaagcattt cctttaatct 132600  
cagatcccgg atactggata tattttgcag ccaacacgtg catccatgca acatttcta 132660

-continued

---

catatacccg gctatgcacc gcgatcatcat cgactgtaacg atacataatg ttaccgtggt 132720  
gcttacattg ctcgtaaaag actttcgtea atttgtctcc ttctccgtaa attccagtgg 132780  
gtcttaggca acaagtatac aattttgctc cattcatgat tacggaatta ttggctttca 132840  
taaccagtgg ctcggccata cgtttacttt ttgctgatac atgtcctggg gatataatcat 132900  
aaagggtatg ctcagggcgg atgaatggat caccgtgttt attgggtcct attgcttcca 132960  
tgctactagt atagatcaaa tacttgattc ctagggtccac acaagctgcc aaaatagtct 133020  
gtgttcata atagtttact ttcattgattt cattatcggg gtattttcca aatacatcca 133080  
ctagagcagc cgtatgaata atcagattta ccccatctag cgcttctctc accttatcaa 133140  
agtcgtttat atcacattgt ataatagttta taacctaac ttctgaggtt attgggtgtg 133200  
gatctttac aatatctatg actctgattt cttgaacatc atctgcacta attaacagtt 133260  
ttactatata cctgcctaga aatccggcac caccagtaac cgcgtacacg gccattgctg 133320  
ccactcataa tatcagacta cttattctat ttactaaat aatggctggt tgtataatag 133380  
accacgataa tatcagagga gttatttact ttgaaccagt ccatggaaaa gataaagttt 133440  
taggatcagt tattggatta aaatccgga cgtatagttt aataattcat cgttacggag 133500  
atattagtea aggatgtgat tccataggca gtccagaaat atttatcggg aacatctttg 133560  
taaacagata tgggttagca tatgtttatt tagatacaga tgtaaatata tctacaatta 133620  
ttgaaaaggc gttatctatt tcaaaaaatg atcagagatt agcgtgtgga gttattggtg 133680  
ttctttacat aaatgaaaag ataatacatt ttcttacaat taacgagaat ggcgtttgat 133740  
atatcagtta atgcgtctaa aacaataaat gcattagttt acttttctac tcagcaaaa 133800  
aaattagtea tacgtaatga agttaatgat acacactaca ctgtcgaatt tgatagggac 133860  
aaagttagtg acacgtttat ttcataatag acacataatg acacataga gataagaggg 133920  
gtgcttcagc aggaaactaa tattggttgc gcggttaata cgcgggttag tatgacttac 133980  
ttgtataata agtatagttt taaactgatt ttagcagaat atataagaca cagaaatact 134040  
atatccggca atattttatc ggcattgatg acactagatg atttggctat taaacagtat 134100  
ggagacattg atctattatt taatgagaaa cttaaagtag actccgattc gggactattt 134160  
gactttgtca actttgtaaa ggatagata tgttgtgatt ctagaatagt agtagctcta 134220  
tctagtctag tatctaaaca ttgggaattg acaataaaaa agtataggtg tatggcatta 134280  
gccgaacata tatctgatag tattccaata tctgagctat ctgactacg atacaatcta 134340  
tgtaagtatc taccgcgaca cactgagagc atagaggata aatttgatta tttgaagac 134400  
gatgattcgt ctacatgttc tgccgtaacc gacagggaaa cggatgtata attttttat 134460  
agtggtgaagg atagataaaa aaatataaatt gttgtattta tcccattcca atcaccttat 134520  
atgattctgt aacacaataa aggagtctca tagatgtata gaggtcagat actggtttga 134580  
taaactgttt attccacata agtatgtttg actttatggt tagaccgca tactttaaca 134640  
aatcactgaa aattggaggt aggtattgac ctctcagaat cagttgcccgt tctggaacat 134700  
taaatgtatt ttttatgata tactccaacg catttatgtg ggcatacaac aagtcattac 134760  
taatggagta ttccaagagt tttagtgtc tagtatttaa caagagaaga gatttcaaca 134820  
gactgtttat gaactcgaat gccgcctcat tgctcgttat attgatgatg tcgaattctc 134880  
ccaatatcat caccgatgag tagctcatct tgttatcggg atccaagttt tctaaagatg 134940  
tcattaaacc ctcgatcatg aatggattta tcatcatcgt ttttatgttg gacatgagct 135000

-continued

---

tagtccgttt gtcacatct atagacgacg atttctgaat tatttcatat atccctctct 135060  
ttaactccag gaacttgta gtaggtcta cttaaatatg ttctogtcta agagatgaaa 135120  
atctttggat ggttgcaocg gacttttctc taaaggatga cgttgcccaa gatcctctct 135180  
taaatgaatc catcttatcc ttggacaaga tggacagtct attttctta gatggtttaa 135240  
tatttttggt acccatgatc tataaaggta gacctaactc tctcggatga cctatatatt 135300  
tattttcagt tttattatac gcataaattg taaaaaatat gttagggtta caaaaatgct 135360  
tcgtggggca ttaatcgttt ttgaaggatt ggacaaatct ggaaaaacaa cacaatgat 135420  
gaacatcatg gaatcaatac cttcaaacac aataaaatc cttaacttcc ctcagagatc 135480  
cactgtcact ggaagatga tagatgacta tctaactcgt aaaaaaacct ataagatca 135540  
tatagttaat ctattatctt gtgcaaatag atgggagttt gcatcttcta tacaagaaca 135600  
actagaacag ggaattactt taatagttga tagatcgcga ttttctggag tagcgtatgc 135660  
cgccgctaaa ggcgcgctca tgactctcag taagagttat gaatctggat tgcctaaacc 135720  
cgacttagtt atattcttgg aatctggtag caaagaaatt aatagaaacg tcggcgagga 135780  
aatttatgaa gatgttcat tccaacaaaa ggtattacaa gaatataaaa aaatgattga 135840  
agaaggagat attcattggc aaattatttc ttctgaattc gaggaagatg taaagaagga 135900  
gttgattaag aatatagtta tagaggctat acacacggtt actggaccag tggggcaact 135960  
gtggatgtaa taaagtgaaa ttacatcttt tataaataga tggtagtaca gtgttataaa 136020  
tggatgaagc atattactct ggcaacttgg aatcagttact cggatcgtg tccgatatgc 136080  
ataccgaact cgcacataa tctcaattag ttattgcca gatagaaact atagataatg 136140  
atataataaa caaggacatt gtaaatctta tcatgtgtag atcaaaactg gataatccat 136200  
ttatctcttt cctagatact gtatatacta ttatagatca agagaactat cagactgagt 136260  
tgattaattc attagacgac aatgaaatta tcgattgtat agttaataag tttatgagct 136320  
tttataagga taacctagaa aatatagtag atgctatcat tactctaaaa tatataatga 136380  
ataatccaga ttttaaaact acgtatgccg aagtactcgg ttccagaata gccgatatag 136440  
atattaacaa agtgatacgt aagaatatac tacaattgtc taatgatatc cgcgacgat 136500  
atgttgaaa aatattaaaa aaaaactct tttttattaa atgacgtcgc ttcgcaatt 136560  
tagaaaatta tgctgtgata tatatcacgc atcaggatata aaagaaaaat ctaaattaat 136620  
tagagacttt ataacagata gggatgataa atatttgatc attaagctat tgctttcccg 136680  
attagacgat agaatttata acatgaacga taaacaaatt ataaaattat atagtataat 136740  
atttaacaaa tctcaggaag atatgttaca agatttagga tacggatata taggagacac 136800  
tattaggact ttcttcaaag agaacacaga aatccgtcca cgagataaaa gcattttaac 136860  
tttagaagaa gtggatagtt ttttaactac gttatcatcc gtaactaaag aatcgcatca 136920  
aataaaatta ttgactgatg tagcatctgt ttgtacatgt aatgatttaa aatgtgtagt 136980  
catgcttatt gataaagatc taaaaattaa agcgggtcct cggtagctac ttaacgctat 137040  
tagtcctcat gcctatgatg tgtttagaaa atctaataac ttgaaagaga taatagaaaa 137100  
ttcatctaaa caaaacttag actctatatac tatttctgtt atgactccaa ttaatccat 137160  
gttagcggaa tcgtgtgatt ctgtcaataa agcgtttaa aaatttccat caggaatggt 137220  
tgcggaagtc aaatcacgat gtgaaagat acaagttcat aaaaaataa acgagtttgc 137280  
cttcttagt agaaacatga aaccagtact ctctcataaa gtggattatc tcaaagaata 137340  
cataccgaaa gcatttaaaa aagctacgtc tatcgtattg gattctgaaa ttgttctgt 137400

-continued

---

agacgaacat aatgtaccgc taccgtttgg aagtttagga atacacaaaa agaaagaata 137460  
taaaaaactct aacatgtggt tgttcgtggt tgactgtttg tactttgatg gattcgatat 137520  
gacggacatt ccattgtacg aacgaagatc ttttctcaaa gatgttatgg ttgaaatacc 137580  
caatagaata gtattctcag agttgacgaa tattagtaac gagtctcagt taactgacgt 137640  
attggatgat gcactaacga gaaaattaga aggattggtc ttaaaagata ttaatggagt 137700  
atacgaaccg ggaagagaa gatggttaaa aataaagcga gactatttga acgaggggtc 137760  
catggcagat tctgccgatt tagtagtact aggtgcttac tatggtaaag gagcaaaggg 137820  
tggatcatg gcagtcttcc taatggggtg ttacgacgat gaatccggta aatggaagac 137880  
ggttaccaag tgttcaggac acgatgataa tacgttaagg gagttgcaag accaattaaa 137940  
gatgattaaa attaacaaag atcccaaaaa aattccagag tggttagtag ttaataaaat 138000  
ctatattccc gattttgtag tagaggatcc aaaacaatct cagatatggg aaatttcagg 138060  
agcagagttt acatcttcca agtcccatac cgcaaatgga atatocatta gatttcttag 138120  
attractagg ataagagagg ataaaaactg gaaagaatct actcatctaa acgatttagt 138180  
aaacttgact aatcttaat agttacatac aaactgaaaa ttaaaataac actatttagt 138240  
tgggtggcgc catggatggt gttattgtat actgtctaaa cgcgctagta aaacatggcg 138300  
aggaaataaa tcatataaaa aatgatttca tgattaaacc atgttgtaa agagttagtg 138360  
aaaaagttaa gaacgttccac atcgacggac aatctaaaa caatacagtg attgcagatt 138420  
tgccatatct ggataatgct gtatcggatg tatgcaattc actgtataaa aagaatgat 138480  
caagaatata cagatttgcg aatttgataa agatagatga cgatgacaag actcctactg 138540  
gtgtatataa ttattttaa cctaaagatg ccattcctgt tattatatcc ataggaaagg 138600  
atagagatgt ttgtgaacta ttaatctcat ctgataaagc gtgtgctgt atagagttaa 138660  
attcatatca cgtagccatt cttcccattg atgttctctt ttttaccaaa ggaaatgcat 138720  
cattgattat tctcctggtt gatttctcta tcgatcggc acctctctta agaagtgtaa 138780  
ccgataataa tgttattata tctagacacc agcgtctaca tgacgagctt ccgagttcca 138840  
attggttcaa gttttacata agtataaagt ccgactattg ttctatatta tatatgggtg 138900  
ttgatggatc tgtgatgcat gcgatagctg ataatagaac tcacgcaatt attagcaaaa 138960  
atatattaga caactactcg attaacgatg agtgtagatg ctgttatttt gaaccacaga 139020  
ttaggattct tgatagagat gagatgctca atggatcacc gtgtgatatg aacagacatt 139080  
gtattatgat gaatttacct gatgtaggcg aatttggatc tagtatgttg gggaaatatg 139140  
aacctgacat gattaagatt gctccttcgg tggctggtaa ttaataaga aatcgagact 139200  
acattcccgg gagacgagga tatagctact acgtttacgg tatagcctct agataathtt 139260  
ttaaagcacg aataaaaaa cataathta aaccaatcta tttcatacta ttttgtgtga 139320  
tcaccatgga cataaagata gatattagta tttctggta taaatttacg gtgactacta 139380  
ggagggaaaa tgaagaaaga aaaaaatata tacctctcca aaaagaaaa actactgatg 139440  
ttatcaaaacc tgattatctt gactacgatg acttggtaga tagagatgag atgtttacta 139500  
ttctagagga atattttatg tacagaggtc tattaggcct cagaataaaa tatggacgac 139560  
tctttaacga aattaaanaa ttcgacaatg atcggaaga acaattcggg actatagaag 139620  
aactcaagca gaaacttaga ttaaathttg aagagggagc agataacttt atagattata 139680  
taaaggatca aaaacaggat atcgtcaaac ttactgtata cattgcatat cttgatagga 139740

-continued

---

ttgtgtgcat gcgtggtaga tgtttgaga aatgagaaac tgttttctag atggaaaat 139800  
 tgtttacgag cgattaaact gtttattgat gatcacatgc ttgataagat aaaatctata 139860  
 ctgcagaata gactagtata tgggaaatg tcatagaaag ttaaaagtta atgagagcaa 139920  
 aaatatataa ggttgatc catattgtt attttttct gtaatagtta gaaaaataca 139980  
 ttcgatggtc tatctatcag attattatgt gttataaggt actttttctc ataataaact 140040  
 agagtatgag taagatagtg tttttcaaaa catataaatc taaaattgat ggatgagata 140100  
 tacagctatt aatttcgaaa atatatatta atctgataac tttaaacatg gatttttgat 140160  
 ggtggttaa cgttttaaaa aaagattttg ttattgtagt atatgataat attaaaagat 140220  
 ggatataaag aatttgctga ctgtatgtac tattttttac attactacat tggctacggc 140280  
 agatatacct actccgccac tgccacacgc tccggtaaac ggggcgatg acgagggaga 140340  
 atatcttgat aagaggcata atcaatggtg taatcagtg ccacctggag aatttgccaa 140400  
 ggtagatgt aatggtaacg ataacacaaa atgtgaacgc tgcccacctc atacataac 140460  
 cgcaatcccc aattactcta atggatgtca tcaatgtaga aaatgccaa caggatcatt 140520  
 tgataaggtta aagtgtaccg gaacacagaa cagtaaatgt tcgtgtcttc ctggttgga 140580  
 ttgcgctact gattcttcc agactgaaga ttgtcgagat tgtataccaa aaaggagatg 140640  
 tccatgcgga tactttggg gaatagatga acaaggaaat cctatttgta aatcgtggtg 140700  
 tgttgggtaa tattgcgact acctacgtaa ttatagact gatccatttc ctccatgcaa 140760  
 actatctaaa tgtaattaat tatgattttg atgataatgt taccatacat tatatcgcta 140820  
 cttggttagt gtattattca gtatgaagac ctattaataa ttacttatct tttgacgatc 140880  
 ttgttataat tataatataa aaacttatgg catagtaact cataattgct gacgcgataa 140940  
 attcgttaata atctgttttg ttaaaattt tataaggaat ctacaggcat aaaaaataaa 141000  
 atataattta taatatactc ttacagcgcg ccatcatgaa taacagcagt aaattaattg 141060  
 ctgttattaa tggatttaga aatagtgac gattttgtga tattagtata gttattaatg 141120  
 atgaaatgat aaacgctcac agactcatcc tatctggagc ctccgaatat ttttccattc 141180  
 tgttttccaa taattttatc gatttcaatg aatacgaagt taatctaagt catttagatt 141240  
 atcaaagtgt taacgatttg atcgattaca tttatgggat accttgagc ctaactaacg 141300  
 ataacgtgaa atatatctt tcaaccgctg attttttaca aattggatct gctattacgg 141360  
 agtgcgaaaa atacatactt aaaaatctt gttctagaaa ctgtatcgat ttctacatat 141420  
 acgctgataa atataataac aagaaaatag aatcagcgtc gtttaacaca atattacaaa 141480  
 atattttgag actcatcaac gatgaaaact ttaaatactt aacagaggaa tcaatgataa 141540  
 aaattttaag cgatgatag ttaaatataa aaaatgagga tttcgcccca ctaattctca 141600  
 ttaaattggt agagagtact caacaacat gcaccgtcga gttacttaa tgccctcagaa 141660  
 tatcattgct tccccacaa gttataaaat cactttatag tcatcgactg gttagttcaa 141720  
 tctacgaatg tataacattc ttaacaata tagcattctt ggatgaatca tttcctagat 141780  
 accatagcat cgagttgata tctatcggta taagtaattc gcatgataag atttccataa 141840  
 actgctacaa tcataaaaaa aatcatggg aatgatatc ttcacgtaga tataggtgta 141900  
 gtttcgcagt ggccgtctc gataatatta tctatatgat ggggtggat gatcagtc 141960  
 cgtatagaag ttcaaagggt atagcgtaca atacatgtac aaattcttg atatatgata 142020  
 taccagagct aaaatatcct cgttctaatt gtgggggact ggctgatgac gaatacattt 142080  
 attgtatagg cggcatacgc gatcaggatt catcgttgac atctagtatt gataaatgga 142140

-continued

---

agccatcaaa accatattgg cagaagtatg ctaaaatgcg cgaacaaaa tgtgatatgg 142200  
gggttgcat gttaaacgga ttaatatatg tcatgggtgg aatcggtaaa ggtgacacgt 142260  
gtaccgacgc actagagagt ttatcagaag atggatggat gaagcatcaa cgtcttccaa 142320  
taaaaatgtc caatatgtcg acgattgttc atgatggcaa gatttatata tctggaggtt 142380  
acaacaatag tagttagtatt aatgtaatat cgaatctagt ccttagctat aattcgatat 142440  
atgatgaatg gaccaaaatta tcatcattaa acattcctag aattaatccc gctctatggt 142500  
cagcgcataa taaattatat gtaggaggag gaatatctga tgatgttoga actaatacat 142560  
ctgaaacata cgataaagaa aaagattgtt ggacattgga taatggtcac gtgttaccac 142620  
gcaattatat aatgtataaa tgcgaaccga ttaaacataa atatccattg gaaaaaacac 142680  
agtacacgaa tgattttcta aagtatttgg aaagttttat aggtagtga tagaacaaaa 142740  
tacataatth tgtaaaaaata aatcactttt tatactaata tgacacgatt accaactctt 142800  
ttgttactaa tatcattagt atactctaca ctttctcctc agacatctaa aaaaataggt 142860  
gatgatgcaa ctctatcatg taatcgaaat aatacaaatg actacgttgt tatgagtgtc 142920  
tggtataagg agcccaattc cattattctt ttagctgcta aaagcgacgt cttgtattht 142980  
gataattata ccaaggataa aatatcttac gactctccat acgatgatct agttacaact 143040  
atcacaatta aatcattgac tgctagagat gccggtactt atgtatgtgc attctttatg 143100  
acatcgcta caaatgacac tgataaagta gattatgaag aatactccac agagttgatt 143160  
gtaaatacag atagtgaatc gactatagac ataatactat ctggatctac acattcaccg 143220  
gaaactagtt ctgagaaacc tgattatata gataattcta attgctcgtc ggtattcgaa 143280  
atcgcgactc cggaaaccaat tactgataat gtagaagatc atacagacac cgtcacatac 143340  
actagtgata gcattaatac agtaagtgca tcatctggag aatccacaac agacgagact 143400  
cgggaaccaa ttactgataa agaagaagat catacagtc cagacactgt ctatacact 143460  
acagtaagta catcatctgg aattgtcact actaaatcaa ccaccgatga tgcggatctt 143520  
tatgatacgt acaatgatac agtaccacca actactgtag gccgtagtac aacctctatt 143580  
agcaattata aaaccaagga cttttagtaa atatttggtt ttaccgcatt aattatattg 143640  
tcggccgtgg caattttctg tattacatat tatatatata ataacgttc acgtaaatac 143700  
aaaacagaga acaaaagtcta gatttttgac ttacataaat gtctgggata gtaaaatcta 143760  
tcatattgag cgggcatctc ggtttaggaa agacagccat agccaaaaga ctatgggaaat 143820  
atatttggat ttgtggtgtc ccataccact agatttcctc gtcctatgga acgagaaggt 143880  
gtcgattacc attacgttaa cagagaggcc atctggaagg gaatagccgc cggaaacttt 143940  
ctagaacata ctgagttttt aggaaatatt tacggaactt ctaaaaactgc tgtgaatata 144000  
gcggtatta ataactgat ttgtgtgatg gatctaaca tcgatggcgt tagaagtctt 144060  
aaaaatacgt acctaagtc ttactcggtg tatataagac ctacctctct taaaatggtt 144120  
gagaccaagc ttcgtcgtag aaacactgaa gccgatgatg agattcatcg tcgtgtgatg 144180  
ttggcaaaaa ctgacatgga tgaggcagggt gaagccggtc tattcgacac tattatcatt 144240  
gaagatgatg tgaatttagc atatagtaag ttaattcaga tactacagga ccgtattaga 144300  
atgtatttta aactaatta gagacttaag acttaaaact tgataattaa taatataact 144360  
cgtttttata tgtgtctatt tcaactgcta atgtattagt taaatattaa aacttaccac 144420  
gtaaaactta aaatttaaaa tgatatttca ttgacagata gatcacacat tatgaacttt 144480

-continued

---

caaggacttg tgttaactga caattgcaaa aatcaatggg tcggtggacc attaatagga 144540  
aaaggtggat tcggtagtat ttatactact aatgacaata attatgtagt aaaaatagag 144600  
cccaaagcta acggatcatt atttacgaa caggcatttt atactagagt acttaacca 144660  
tccgttatcg aagaatggaa aaaatctcac aatataaagc acgtaggtct tatcacgtgc 144720  
aaggcatttg gtctatacaa atccattaat gtggaatc gattccttgg aattaataga 144780  
ttaggtgcag atctagatgc ggtgatcaga gccataata atagactacc aaaaaggctc 144840  
gtgatgttga tcggaatcga aatcttaaat accatacaat ttatgcacga gcaaggatat 144900  
tctcacggag atattaaagc gagtaataa gtcttggatc aaatagataa gaataaatta 144960  
tatctagtgg attacggatt ggtttctaaa ttcattgtcta atggcgaaca tgttccattt 145020  
ataagaaatc caaataaaat ggataacggt actctagaat ttacacctat agattcgcac 145080  
aaaggatacg ttgtatctag acgtggagat ctagaacac ttggatattg tatgattaga 145140  
tgggtgggag gtatcttggc atggactaag atactctgaaa caaagaattg tgcattagta 145200  
agtgccacaa aacagaaata tgttaacaat actgcgactt tggtaatgac cagtttgcaa 145260  
tatgaaccta gagaattgct gcaatatatt accatggtaa actctttgac atattttgag 145320  
gaaccaatc acgacaagtt tcggcacata ttaatgcagg gtgtatatta ttaagtgtgg 145380  
tgtttggtcg ataaaaatta aaaaataact taatttatta ttgatctcgt gtgtacaacc 145440  
gaaatcatgg cgatgttcta cgcacacgct ctccgtgggt acgacgagaa tcttcatgcc 145500  
tttctcgaa tatcatcgac tgttgccaat gatgtcagga aatattctgt tgtgtcagtt 145560  
tataataaca agtatgacat tgtaaaagac aaatatatgt ggtgttacag tcagggtaac 145620  
aagagatata ttggagcact gctgcctatg ttgagtgca atgaatatct acaaattgga 145680  
gatccgatcc atgatcaaga aggaaatcaa atctctatca tcacatatcg ccacaaaaac 145740  
tactatgctc taagcgaat cgggtacgag agtctagact tgtgtttgga aggagtaggg 145800  
attcatcatc acgtacttga aacaggaaac gctgtatatg gaaaagtca acatgattat 145860  
tctactatca aagagaaggc caaagaaatg agtacactta gtccaggacc tatcatcgat 145920  
taccacgtct ggataggaga ttgtatctgt caagttactg ctgtggacgt acatggaaag 145980  
gaaattatga gaatgagatt caaaaagggt gcggtgcttc cgatcccaaa tctggtaaaa 146040  
gttaaaacttg gggagaatga tacagaaaat ctttcttcta ctatatcggc ggcaccatcg 146100  
aggtaaccac ctctctggaa gacagcgtga ataatgtact catgaaacgt ttggaatcta 146160  
tacgccatat gtggtctggt gtatatgac attttgatat tgtgaatgg aaagaatgct 146220  
gttatgtgca tacgcatttg tctaatcaaa atcttatacc gagtactgta aaaacaaatt 146280  
tgtacatgaa gactatggga tcatgcattc aaatggattc catggaagct ctagagtatc 146340  
ttagcgaact gaaggaaatca ggtggatgga gtcccagacc agaaatgcag gaatttgaat 146400  
atccagatgg agtggaaagac actgaaatcaa ttgagagatt ggtagaggag ttcttcaata 146460  
gatcagaact tcaggctggg gaatcagtca aatttggtaa ttctattaat tgttaaacat 146520  
acatctgttt cagctaagca actaagaaca cgtatcggc agcagcttcc ttctatactc 146580  
tcatcttcta ccaacacaaa ggggtgatat ttgttcattg gagttgataa taatacacac 146640  
aaagtatttg gattcacggg gggttacgac tacctcagac tggtagagaa tgatatagaa 146700  
aagcatatca aaagactttg tgtgtgtat ttctgtgaga agaaagagga catcaagtac 146760  
gcgtgtcgat tcatcaaggt atataaacct ggggatgagg ctacctcgac atacgtgtgc 146820  
gctatcaaag tggaaagatg ctgtttgtct gtgtttgcag attggccaga atcatggat 146880

-continued

---

atggatacta atggtatcaa gaagtattct ccagatgaat ggggtgcaca tataaaattt 146940  
taattaatgt aatagagaac aaataataag gttgtaatat catatagaca ataactaaca 147000  
attaattagt aactgttatc tctttttaac taaccaacta actatatacc tattaatata 147060  
tcgtaattat agtttcttaa catctattaa tcattaattc gcttctttaa tttttataa 147120  
actaacattg ttaattgaaa agggataaca tgttacagaa tataaattat atatggattt 147180  
ttttaaaaag gaaataacttg actggagtat atatttatct cttcattata tagcacgcgt 147240  
gttttccaat ttttccacat cccatataat acaggattat aatctcgttc gaacatacga 147300  
gaaagtggat aaaacaatag ttgatttttt atctaggttg ccaaatttat tccatatttt 147360  
agaatatggg gaaaaatattc tacatattta ttctatggat gatgctaata cgaatattat 147420  
aatttttttt ctgatatagag tattaaatat taataagaac gggtcattta tacacaatct 147480  
cgggttatca tcattccatta atataaaaga atagtatat caattagtta ataattgatca 147540  
tccagataat aggataagac taatgcttga aaatggacgt agaacaagac attttttgtc 147600  
ttatatatca gatacagtta atatctatat atgtatttta ataatcatg gattttatat 147660  
agatgccgaa gacagttacg gttgtacatt attacataga tgtatatatc actataagaa 147720  
atcagaatca gaatcatata atgaattaat taagatattg ttaaataatg gatccgatgt 147780  
agataaaaaa gatcagtcag gaaacacacc ttttacccta ttatgtaaac acgatatcaa 147840  
caacgtggaa ttgtttgaga tatgtttaga gaatgcta atagactctg tagactttaa 147900  
tagatataca cctcttcatt atgtctcatg tcgtaaaaaa tatgattttg taaagttatt 147960  
aatttctaaa ggagcaaatg ttaatgcgcg taataaattc ggaactactc cattttattg 148020  
tggaaattata cacggtatct cgcttataaa actatatttg gaatcagaca cagagttaga 148080  
aatagataat gaacatatag ttgcctattt aataattttt gatgctgttg aatctttaga 148140  
ttatctatta tccagaggag ttattgatat taactatcgt actatataca acgaaacatc 148200  
tatttacgac gctgtcagtt ataatgcgta taatacgttg gtctatctat taaacaaaaa 148260  
tgggtatttt gagacgatta ctactagtgg atgtacatgt atttcggaag cagtcgcaaa 148320  
caacaacaaa ataataatgg aagtactatt gtctaacga ccatctttga aaattatgat 148380  
acagtctatg atagcaatta ctaaacataa acagcataat gcagatttat tgaaaatgtg 148440  
tataaaatat actgcgtgta tgaccgatta tgatactctt atagatgtac agtcgctaca 148500  
gcaatataaa tggatatttt taaaatggtt cgatgaaata gatatcatga agagatgta 148560  
tataaaaaat aaaactgfat tccaattagt tttttgtatc aaagacatta atactttaat 148620  
gagatacggg aaacatcctt ctttcgtgaa gtgcactagt ctgcagctat acggaagtcg 148680  
tgtacgtaat atcatagcat ctattagata tcgtcagaga ttaattagtc tattatccaa 148740  
gaagctggat cctggagata aatggctgtg ttttcctaac gaaataaaat ataaaatatt 148800  
ggaaaacttt aacgataacg aactatccac atatctaaaa atcttataaa cactattaaa 148860  
atataaaatc taagtaggat aaaatcacac tacatcattg tttcctttta gtgctcgaca 148920  
gtgtatacta tttttaacgc tcataaataa aaatgaaaac gatttccggt gttacgttgt 148980  
tatgcgtact acctgctggt gtttattcaa catgtactgt acccactatg aataacgcta 149040  
aattaacgtc taccgaaaca tcgtttaatg ataaacagaa agttacattt acatgtgatc 149100  
agggatatca ttctttggat ccaaagtctg tctgcgaaac agataaatgg aaatacgaaa 149160  
atccatgcaa gaaaatgtgc acagtttctg attatgtctc tgaattatat gataagccat 149220

-continued

---

tatacgaagt gaattccacc atgacactaa gttgcaacgg cgaaacaaaa tattttcgtt 149280  
gccaagaaaa aaatggaat acttcttgga atgatactgt tacgtgtcct aatgcggaat 149340  
gtcaacctct tcaattagaa cacggatcgt gtcaaccagt taaagaaaa tactcatttg 149400  
gggaatatat gactatcaac tgtgatgtg gatatgaggt tattggtgct tcgtacataa 149460  
gttgtacagc taattcttgg aatgttattc catcatgtca acaaaaatgt gatatgccgt 149520  
ctctatctaa cggattaatt tccgatccta cttttctat cgggtggcgtt atacatctta 149580  
gttgtaaaag tggttttaca ctaacggggc ctccatcctc cacatgtatc gacggtaaat 149640  
ggaatcccgt actccaata tgtgtacgaa ctaacgaaaa atttgatcca gtggatgatg 149700  
gtcccagcga tgagacagat ttgagcaaac tctcgaaaga cgttgtacaa tatgaacaag 149760  
aaatagaatc gttagaagca acttatcata taatcatagt ggcgttaaca attatgggcg 149820  
tcatatTTTT aatctccgtt atagtattag tttgttcctg tgacaaaaat aatgaccaat 149880  
ataagttcca taaattgcta ccgtaaatat aaatccgtta aaataattaa taatttaata 149940  
acaaacaagt atcaaaagat taaagactta tagctagaat caattgagat gtcttcttca 150000  
gtggatgttg atatctacga tgcggttaga gcatttttac tcaggcacta ttataacaag 150060  
agatttattg tgtatggaag aagtaacgcc atattacata atatatacag gctatttaca 150120  
agatgcccgc ttataccgtt cgatgatata gtacgtacta tgccaaatga atcacgtgtt 150180  
aaacaatggg tgatggatc acttaatggg ataatgatga atgaacgcaa tgtttctgta 150240  
agcgttgga cgggaatact attcattgga atgtttttcg attacaataa aaatagtatc 150300  
aacaatcaac taatgatga tataattaat agcgtatcta taattctagc taatgagaga 150360  
tatagaagcg cttttaacga cgatggtata tacatccgta gaaatgat taacaagttg 150420  
tacggatacg catctctaac tactatttggc acgatcctg gaggtgtttg ttattatctg 150480  
ttgatgcatc tagttagttt gtataaataa ttatttcaat atactagtta aaattttaag 150540  
atTTTaaatg tataaaaaac taataacgtt tttatttga ataggtgcat tagcatccta 150600  
ttcgaataat gagtacactc cgtttaataa actgagtgta aaactctata tagatggagt 150660  
agataatata gaaaattcat atactgatga taataatgaa ttggtgttaa atTTTaaaga 150720  
gtacacaatt tctattatta cagagtcctg cgacgtcga tttgattcca tagatataga 150780  
tgTTTataaac gactataaaa ttattgatat gtataccatt gactcgtcta ctattcaacg 150840  
cagaggtcac acgtgtagaa tatctaccaa attatcatgc cattatgata agtaccctta 150900  
tattcacaaa tatgatgggt atgagcgaca atattctatt actgcagagg gaaaatgcta 150960  
taaaggaata aaatagaaa taagtatgat caacgatgat actctattga gaaaacatac 151020  
tctTaaaatt ggatctactt atatatttga tcgtcatgga catagtaata catattattc 151080  
aaaatgatgat tttTaaaat tTaaaatata ttatcacttc agtgacagta gtcaataaac 151140  
aaacaacacc atgagatata ttataattct cgcagttttg ttcattaata gtatacatgc 151200  
Taaaataact agttataagt ttgaatccgt caattttgat tccaaaattg aatggactgg 151260  
ggatggctca tacaatatat ccctTaaaaa ttatggcatc aagacgtggc aaacaatgta 151320  
tacaatgta ccagaaggaa catacgacat atccgcattt ccaagaatg atttcgtatc 151380  
tttctgggtt aaatttgaac aaggcgatta taaagtgaaa gagtattgta cgggactatg 151440  
cgtcgaagta aaaattggac caccgactgt aacattaact gaatcgcagc accatatcaa 151500  
tttgtacatc gagcatccgt atgctactag aggtagcaaa aagattccta tttacaaacg 151560  
cggtgacatg tgtgatattc acttgttTga tacggctaac tTcacattcg gagattctaa 151620

-continued

---

agaaccagta ccatatgata tcatgacta cgattgcacg tctacaggtt gcagcataga 151680  
ctttgtcaca acagaaaaag tgtgctgac agcacaggga gccacagaag ggtttctcga 151740  
aaaaattact ccatggagtt cgaagtatg tctgacacct aaaagagtg tatatacatg 151800  
cgcaattaga tccaaagaag atgttcccaa tttcaaggac aaaatggcca gagttatcaa 151860  
gagaaaattt aataaacagt ctcaatctta tttactaaa tttctcgga gcacattaaa 151920  
tcatgttacc acttttctta gcatgcttaa cttgactaaa tattcataac taatttttat 151980  
taatgatata aaaacgaaat aaaactgcat attatacact ggtaaacgcc cttataggt 152040  
ctaaccattt tcaagatgag gtccctgatt atagtcctc tgttccctc tatcatctac 152100  
tccatgtcta ttagacgatg tgagaagact gaagaggaaa catggggatt gaaaataggg 152160  
ttgtgtataa ttgccaaaga tttctatccc gaaagaactg attgcagtgt tcatctocca 152220  
actgcaagtg aaggattgat aactgaaggc aatggattca gggatatacg aaacaccgat 152280  
aaattataaa aaaagcaatg tgtccgctgt ttcggttaat aatactattt tcgtaactgg 152340  
cggattattc ataaataact ctaatagcac gatcgtggtt aacaatatgg aaaaactga 152400  
catttataaa gacaaacaat ggtcgttat agaaatgcct atggctaggg tatatcacgg 152460  
catcgactcg acatttggaa tgttatattt tgccggaggt ctatccgta ccgaacaata 152520  
tggttaattt gagaaaaaca acgagatata ttgttacaat cctagaacga ataagtgggt 152580  
tgatatttca tatactattt ataagatata catatcatca ttgtgtaaac taaataacgt 152640  
cttctatgta tttagtaagg acattggata tgtgaaaaag tatgatggg catggaagt 152700  
agtacatgat cgtctcccc ctataaaggc attatcaact tctccttatt gattgaaaat 152760  
gaaaatata atagttttta tgtatagcag tattacccta tagttttatt gcttactact 152820  
aacatggata cagatgttac aaatgtagaa gatatacaca atgaaataga tagagagaaa 152880  
gaagaaatac taaaaaatgt agaattgaa aataataaaa acattaacaa gaatcatccc 152940  
aatgaatata ttagagaagc actcgttatt aataccagta gtaatagtga ttccattgat 153000  
aaagaagtta tagaatgtat ctgtcacgat gtaggaatat agatcatata tactaatttt 153060  
tataatcgat acaaacata aaaaacaact cgttattaca tagcaggcat ggaatccttc 153120  
aagtattgtt ttgataacga tggcaagaaa tggattatcg gaaatacttt atattctggt 153180  
aattcaatc tctataaggt cagaaaaaat ttcactagtt cgttctacaa ttacgtaagt 153240  
aagatagata acaaatcaca caagccattg ttgtctgaaa tacgattcta tatatctgta 153300  
ttggatcctt tgactatcga caactggaca cgggaacgtg gtataaagta tttggctatt 153360  
ccagatctgt atggaattgg agaaccgat gattatattg tcttcgttat aaagaatttg 153420  
ggaagagtat tcgccccaaa ggatactgaa tcagtcttcg aagcatgtgt cactatgata 153480  
aacacgttag agtttatata ctctcaagga tttaccatg gaaaaataga accgaggaat 153540  
atactgatta gaaataaacg tctttcacta attgactatt ctagaactaa caaactatac 153600  
aagagtggaa actcacatat agattacaac gaggacatga taacttcagg aaatatcaat 153660  
tatatgtgtg tagacaatca tcttgagca acagtttcaa gacgaggaga tttagaaatg 153720  
ttgggatatt gcatgataa atggttcggt ggcaaacctc catggaaaaa cgaaagttagt 153780  
ataaaagtaa taaaacaaaa aaaagaatat aaaaaattt tagctacttt ctttgaggac 153840  
tgtttctctg aaggaaatga acctctggaa ttagttagat atatagaatt agtatacacg 153900  
ttagattatt ctcaactcc taattatgac agactacgta gactgtttat acaagattga 153960

-continued

---

aattatattc ttttttttat agagtgtggt agtgttacgg atatctaata ttaatattag 154020  
actatctcta tcgcgctaca cgaccaatat cgattactat ggatatcttc tatgaaagga 154080  
gagaatgat tcattttccc agcgtcaatc tcgtcagat tgacaatact gtattatgga 154140  
gctaattgat ccactgctga acagctatca aaatatgtag aaacggagga gaacacggat 154200  
aaggtttagc ctcaaaatat ctcatcctca tccataaata aagtatatgg gcgatattct 154260  
gccgtgttta aagattcctt tttgagaaaa attggcgata agtttcaaac tgttgacttc 154320  
actgattgtc gcactataga tgcaatcaac aagtgtgtag atatctttac tgaggggaaa 154380  
atcaatccac tattggatga accattgtct cctagcaatt agtgccgtat actttaaacg 154440  
aaaatggttg acgccattcg aaaaggaatt taccagtgtat tatccctttt acgtatctcc 154500  
gacggaaatg gtagacgtaa gtatgatgtc tatgtacggc gagctattta atcacgcac 154560  
tgtaaaagaa tcatttcgca acttttcaat catagaactg ccatatgttg gagatactag 154620  
tatgatggtc attcttccag acaagattga tggattagaa tccatagaac aaaatctaac 154680  
agatacaaat ttaagaaat ggtgtaactc tctggaagct acgtttatcg atgttcacat 154740  
tcccagttt aaggtaacag gctcgtataa tctggtggat actctagtaa agtcaggact 154800  
gacagaggtg ttcggttcaa ctggagatta tagcaatatg tgtaatttag atgtgagtg 154860  
cgacgctatg atccacaaaa cgtatataga tgtcaatgaa gagtatacag aagcagctgc 154920  
agcaacttct gtactagtgg cagactgtgc atcaacagtt acaaatgagt tctgtgcaga 154980  
tcacccgttc atctatgtga ttaggcatgt tgatggcaaa attcttttcg ttggtagata 155040  
ttgctctcca acaactaatt gttaccatt ttttttaaaa aaaatagaaa aaacatgttg 155100  
tattagtgca ggtcgttgtt ctccaattg caattggtaa gatgacggcc aactttagta 155160  
cccacgtctt ttcaccacag cactgtggat gtgacagact gaccagtatt gatgacgtca 155220  
aacaatggtt gactgaatat atttattggt cgtcctatgc ataccgcaac aggcaatgcg 155280  
ctggacaatt gtattccaca ctctctctt ttagagatga tgcggaatta gtgttcacg 155340  
acattcgcga gctggtaaaa aatatgccgt gggatgatgt caaagattgt acagaaatca 155400  
tccgttgta tataccggat gagcaaaaa ccatcagaga gatttcggcc atcatcggac 155460  
tttgtgcata tgctgctact tactggggag gtgaagacca tcccactagt aacagtctga 155520  
acgcattggt tgtgatgctt gagatgctaa attacgtgga ttataacatc atattccggc 155580  
gtatgaattg atgagttgta catcttgac attttcttc ttctctctc ctttctctc 155640  
cttctccctt tctctcttc tccctctctc cctctctctc ctttccaga acaaaacttt 155700  
tttaccact ataaaaata atgagtatac tacctattat atttctctc atattttttt 155760  
attcttcatt cgttcagact ttaacgcgc ctgaatgtat cgacaaaggc caatattttg 155820  
catcatcctt ggagttagaa aacgagccag taactctacc atgtcctcaa ataaatcgc 155880  
tatcatccgg atataatata ttagatattt tatgggaaaa acgaggagcg gataataata 155940  
gaattatacc gatagataat ggtagcaata tgctaattct gaaccgaca caatcagact 156000  
ctggtattta tatatgcatt accacgaacg aaacctactg tgacatgatg tcgttaaatt 156060  
tgacaatcgt gtctgtctca gaatcaata tagatcttat ctgctatcca caaatagtaa 156120  
atgagagatc tactggcgaa atggatgtc ccaatattaa tgcatttatt gctagtaacg 156180  
taaacgcaga tattatatgg agcggacatc gacgccttag aaataagaga cttaaacaac 156240  
ggacacctgg aattattacc atagaagatg ttagaaaaaa tgatgctggt tattatacat 156300  
gtgttttaga atatataac ggtggcaaaa catataacgt aaccagaatt gtaaaattag 156360

-continued

---

aggtacggga taaaataata ccttctacta tgcaattacc agatggcatt gtaacttcaa 156420  
taggtagtaa tttgactatt gcgtgtagag tatcgttgag acctcccaca acggatgcag 156480  
acgtcttttg gataagtaat ggtatgtatt acgaagaaga tgatggggac ggaacggta 156540  
gaataagtgt agcaataaaa atctatatga cggataagag acgtgttatt acatcccggt 156600  
taaacattaa tcctgtcaag gaagaagatg ctacaacggt tacgtgtatg gcgtttacta 156660  
ttcctagcat cagcaaaaaca gttactgtta gtataacggt aatgtatggt gttacatttc 156720  
catgtcaatt gagtttataa gaatttttta tacattatct tccaacaaac aattgacgaa 156780  
cgtattgcta tgattaaact cccacgaata ctatgcatat tattaatcat taacttgacg 156840  
actataccta gtgctatfff gacatactca gttctttgtg taattgocgt atctatatta 156900  
ttaaagtacg taaatctagc tatagtttta ttatttaatt ttagataata taccgtctcc 156960  
ttatttttaa aaattgccc accttttatt aaatcatgaa tgggaatttc tatgtcatcg 157020  
ttagtatatt gtgaacaaca agagcagata tctataggaa aggggtggaat gcgatacatt 157080  
gatctatgta gttttaaaac acacgcaaac tttgaagaat ttatataaat cattccatcg 157140  
atacatcctt ctatggtgac atgtatatac ccaggaattc ttttattaat gtcagaaaat 157200  
gtataaacta aaacattgcc cgaagcgggt gcctctatct gcgttatatc cgttcttaac 157260  
ttacaaaatg taaccaatac ctttgcatac cttgtttgtg tcggcaacgt tagttttaaac 157320  
ttgacgaatg gattaattac aatagcatga tccgcgcac tattaagttt tttacttta 157380  
acgcccttgt atgtttttac agagacttta tctaaatttc tagtgcttgt atgtgttata 157440  
aatataacgg gatatagaac cgaatcacct accttagata cccaattaca ttttatcaga 157500  
tccagataat aaacaaattt tgcgcoccta actaattcta tattgttata tattttacia 157560  
ttggttatga tatcatgtaa taacttgag tctaaccgc atcgtcgtac gtttatacaa 157620  
ttgtgattta gtgtagtata tctacacatg tatttttccg cactatagta ttctggacta 157680  
gtgataaac tatcgttata tctatcttca atgaactcat cgagatattg ctctctgtca 157740  
tattcataca cctgcataaa ctttctagac atcttacaat ccgtgttatt ttaggatcat 157800  
atttacatat ttacgggtat atcaaagatg ttagattagt taatgggaat cgtctataat 157860  
aatgaatatt aaacaattat atgaggactt ttaccacaaa gcatcataaa aatgagtcgt 157920  
cgtctgattt atgtttttaa tatcaaccgc gaatcaactc ataaaaatac agagaatgaa 157980  
atatatacat attttagtca ttgcaatata gaccatactt ctacagaact tgattttgta 158040  
gttaaaaact atgatctaaa cagacgacaa cctgtaactg ggtatactgc actacactgc 158100  
tatttgata ataactactt tacaaaacgat gtactgaaga tattattaaa tcatggagtg 158160  
gatgtaacga tgaaaaccag tagcggacgt atgcctgttt atatatgct tactagatgt 158220  
tgtaatattt cacatgatgt agttagatag atgatagaca aagataaaaa ccacttatcg 158280  
catagagact attccaacct attactagag tatataaaat ctcgttacct gttattaaag 158340  
gaagaggata tcgatgagaa catagtatcc actttattag ataagggaaat cgatcctaac 158400  
tttaaacaaag acggatatac agcgttacat tattattatt tgggtctcgc acacgtttat 158460  
aaaccaggtg agttagataa accgataacg ataaaaaagg ccaagcgaat tatttctttg 158520  
tttatacaac atggagctaa tctaaacgcg ttagataatt gtggaatac accattccat 158580  
ttgtatctta gtattgaaat gtgtaataat atccatata ctaaaatgct gttgactttt 158640  
aatccgaatt tcgaaatag taataatcat ggattaacgc ctatactatg ttatataact 158700

-continued

---

tccgactaca tacaacacga tattcttgtt atggttaatac atcactatga aacaaatggt 158760  
ggagaaatgc cगतगगतग गगगगतग atcgattcg agtttatcaa aacatattct 158820  
acacgtccgg cगगगगतग aacttatttg atgaataggt ttaaaaatat aaatatttat 158880  
accgctatg aaggaaagac attattacac gtagcatgtg aatataataa tacacaagta 158940  
atagattatc ttatacgtat caacggagat ataaatgcgt taaccgacaa taacaaacac 159000  
gtacacacac tcattataga taacaaagaa aattcccat ataccattaa ttgtttactg 159060  
tatatactta gatataattg agataagaat gtgataagat cgttggtgga tcaacttcca 159120  
tctctaccta tctttcgtcg cttatcacac tagtcatatc ctaaattgtg atcatattcc 159180  
accaaagat tgtgaaagag attgagatta aatcgtctaa caaacaatta gtttttatga 159240  
cattaacata taataaataa attaatacatt attgacttaa cgatgacgaa agttatcatc 159300  
atccttaggat tcttgattat taatacaaat tcattgtcta tgaatgtga acaagggtgc 159360  
tcatattata attcacaaga attaaagtgt tgtaaacat gtaagccagg aacatattca 159420  
gatcatcgat gtgataaata cagcgatacc atttgggac attgtccgag tgacacattc 159480  
acgtcaatat ataactgttc tccttggtgt catagttgta gaggtccatg tggtaactaat 159540  
cgagtagagg tcacacctg tacacctacc acaaatagaa tctgtcattg tgactcgaat 159600  
agttattgtc tccttaaagc ttctgatggt aactgtgtta catgtgctcc taaaacaaaa 159660  
tgtggtcgtg gगतगगगाा गगगगगगा गगतगगग गतााततत ttgtaagaaa 159720  
tgtcggaagg gtacttattc agatattgta tctgactctg atcaatgtaa accaatgaca 159780  
agataagact tactcgcac tactggatag acataaata tcctcctcgt aataatgaaa 159840  
tataaatata cactaattat taatatcaat aacaatcgag tattaatata taggtcattt 159900  
ttaaatecct tttgggttcc gtcccaaacg gcgtttcggg ctgcgtcgc gccatggcca 159960  
tgccgagcct ctcccgctgc tcctccatcg aggacgactt caactatggc agctcgggtg 160020  
cgtctgccag cgtgcacata cgaatggcat ttctaagaaa agtctaagggt atcctttgtc 160080  
tacaatttct tttacaacg gcaacaactg cगततततत atactttgac tgcatgcgga 160140  
catttataca agggagtccct gttctaatat tggcatcaat gttcggatct ataggcttga 160200  
ttttcgcatt gactttacac agacataaac atccctgaa tctgtacctg ctttgggat 160260  
ttacactgtc ggaatctcta acgctggcct ctggtgttac tttctatgat gtgcattgct 160320  
ttatgcaagc tttcatgtg actactgcag cgtttcttgc tctgactaca tatactctac 160380  
aatcaagag agatttcagt aaacttgag cगगगगगgt tgctgctttg tggattttaa 160440  
ttttgtcagg actcctgggg atatttgtgc aaaatgagac agtggagctg gtccctgtctg 160500  
cttttggggc ccttgatttc tgtggattca ttatctatga cacgcaactca ctaatacata 160560  
agctctcgcc tgaagagtat gtgttagcct ctatcaatct ctacttggat atcatcaatc 160620  
tgttcttga tctgttcag cttttggaag tatctaataa gaaataaagt ttaaaataga 160680  
attaataaaa acatataagg cattttttaa acatggattg gaaaccaagg tagttagtta 160740  
atacacacaa gatataattt tttcacatca tccaccatg ggtaacacca aggttgttag 160800  
ttaataatat acaagatatt ttttctcact ctgatccatg taaaccaagg acgagataag 160860  
acactctcat tcctcatcca caaccatta aaaaaatgga aattaaagcc ctctattagc 160920  
ataaacggct acaggcttac cttcacaatg gccttctctt gtgccaggt cagaccctgt 160980  
cattgccacg ctactaagga ctccctgaat accgtggccg acgtcagaca ttgtctgact 161040  
gaatacatcc tgtgggttcc tcatagatgg acccatagag aaagcgcagg gtctctctac 161100

-continued

---

aggcttctca tctctttcag aactgatgca acggagctct ttggtggtga gttgaaggat 161160  
tcacttccgt gggacaattg cgtggagatc attaaatggt tcatcagaaa tgactccatg 161220  
aaaaccgocg aagaacttcg tgcaatcatt ggacttttga ctcaatcagc tatcgtctct 161280  
ggaagagtct tcaacgataa gtatatcgac atactactta tgctgcgaaa gattctgaac 161340  
gagaacgact atctcacocct cttggatcat atccgcactg ctaaatacta aatctccttc 161400  
atgctctctc actacacttt ttatcatctt atgaggaatg attgccttcg tgaatatgga 161460  
ataattagca ccagaatagc tatggattat tgtggtagag agtgcaactat tctatgtcgt 161520  
ctactggatg aagatgtgac gtacaaaaa ataaaaccag agattgaaac gtgtcacaac 161580  
ttatcaaac ataatagatag acgaggaaac aatgcgctac attgttacgt ctccaataaa 161640  
tgcgatacag acattaagat tgttcggctg ttactctctc gcggagtoga gagactttgt 161700  
agaaacaacg aaggattaac tccgctagga gcatacagta agcatagata cgtcaaatct 161760  
cagattgtgc atctactgat atccagctat tcgaattcct ctaacgaact caagtogaat 161820  
ataaatgatt tcgatctgta ttcgtataat atcgacttac gtctgctaaa atacctaatt 161880  
gtggataaac ggatacgtcc gtccaagaat acgaattatg caatcaatgg tctcggattg 161940  
gtggatatat acgtaacgac gcctaattcc agaccagaag tattgctatg gcttcttaaa 162000  
tcagaatggt acagcacogg ttacgtattt cgtacctgta tgtacgacag tgatattgtg 162060  
aagaactctc ttcattacta tatatcgtct catagagaat ctcaatctct atccaaggat 162120  
gtaattaaat gtttgatcaa taacaatggt tccattcatg gcagagacga aggaggatct 162180  
ttaccocatc aatactactg gtctttctca accatagata tagagattgt taaattatta 162240  
ataaaggatg tggacacgtg tagagtatac gacgtcagcc ctatattaga ggcgtattat 162300  
ctaaacaagc gatttagagt aaccccatat aatgtagaca tggaaatcgt taatcttctt 162360  
attgagagac gtcatactct tgtcgaogta atgcgtagta ttacttcgta cgattccaga 162420  
gaatataacc actacatcat cgataacatt ctaaagagat ttagacaaca ggatgaatcc 162480  
atcgtacaag ccatgttgat aaactactta cattacggcg atatggtaag tatarctatc 162540  
attcaatgca tgttggtataa cggacaacaa ctatcctctg cactgactact ttgttaataa 162600  
taatctcgtc gatgtaaacy tcgtaagggt tatcgtggaa aatatggaca cgcggctgta 162660  
aatcacgtat cgaacaatgg ccgtctatgt atgtacggtc tgatattatc gagatttaat 162720  
aattcggggt atcactgtta tgaaccata ctgatagatg tatttgatg actaagcaag 162780  
tacatggata atatagatat gatcgataac tctactatat tacgoggtcg atgtcaataa 162840  
tatacaattt gcaaaagcgt tattggaata tggagcagat gttacaacat cacacgctcg 162900  
ataatcaata cggccatcca gaaaagcagt taccaagag aaaacaaaac gaggatagtt 162960  
gatttattac tgagttacca tcccactcta gagactatga ttgacgcatt taatagagat 163020  
atacgcctac tatacctga accattatc gccgtatca gatacgcctt aatcctagat 163080  
gatgatthtc cttctaaagt aaatatgata tcttcggctc gtcataagga actaaagcgc 163140  
tatagagtag acattaatag aatgaagaat gtctacatat caggcgtctc catgtttgat 163200  
atattcttta aacggaacag acgccacaga ttgagatagc caaagaatcc gacatcaaat 163260  
ggtacaaaaa agaactaacg tccatcatta cagaaactgt aaagaacaat gagaggatcg 163320  
actccatagt ggacaacatt aatacagacg ataacttgat ttcgaaatta cccatggaga 163380  
tactttatta ctccatataa taatttatca tggagcgata atgtcctggt tcatttggtt 163440

-continued

---

ccatgacata ttacaaaatc gattccgctc aagatgataa aaacatttac cggcatcata 163500  
aacacggagt ttattttata tgtctcgcat aaacattact aaaaaaatat attgttctgt 163560  
ttttctttca catctttaat tatgaaaag taaatcatta tgagatggac gagattgtac 163620  
gcatcgttgc cgacagtatg tggtaacatac ctaacgtatt tatggacgac ggtaagaatg 163680  
aaggtcacgt ttctgtcaac aatgtctgtc atatgtattt tacgttcttt gatgtagata 163740  
catcgtctca tctgtttaag ctagtattta aacactgcga tctgaataaa cgaggtaact 163800  
ctccattaca ttgctatacg atgaatacac gatttaatcc atctgtatta aagatattgt 163860  
tacaccacgg catgcgtaac tttgatagca aggatgacca ctatcaatcg ataacaagat 163920  
ctttgatata ctaacggaca ccattgatga ctttagtaaa tcatccgac tattgctgtg 163980  
ttatcttaga tataaattca atgggagctt aaactattac gttctgtaca aaggatccga 164040  
ccctaattgc gccgacgagg atgaactcac ttctcttcat tactactgta aacacatatac 164100  
cacgttctac gaaagcaatt attacaagtt aagtcacact aagatgacgag ccgagaagcg 164160  
attcatctac gcgataatag attatggagc aaacattaac gcggttacac acttaccttc 164220  
aacagtatac caaacatagt cctcgtgtgg tgtatgctct tttatctcga ggatacgtaa 164280  
taatcttgat tgtacacca tcatggaacg attgtgcaac aggtcatatt ctcataatgt 164340  
tactcaattg gcacgaacaa aaggaagaag gacaacatct actttatcta ttcataaaac 164400  
ataatcaagg atacactctc aatatactac ggtatctatt agataggttc gacattcaga 164460  
aagacgaata ctataatacc gcctttcaaa attgtaacaa caatggtgce tcatacatcg 164520  
gatacgacat caaccttccg actaaagacg gtattcgact tgggtgttga aaacagaaac 164580  
atcatataca aggcggtatg tgtgaatgac atcatccacc acagactgaa agtatctcta 164640  
cctatgatta aatcgttgtt ctacaagatg tctctoccta cgacgattac tacgtaaaaa 164700  
agatactagc ctactgccta ttaagggacg agtcattcgc ggaactacat agtaaatctt 164760  
gtttaaacga ggactataaa agtgtattta tgaaaaaat atcattcgat aagatagatt 164820  
ccatcatcgt gacataagtc gccttaaaga gattcgaatc tccgacaccg acctgtatac 164880  
ggatcacag ctatcttaaa gccatacatt cagacagtca catttcattt cccatgtacg 164940  
acgatctcat agaacagtgc catctatcga tggagcgtaa aagtaaacctc gtcgacaaag 165000  
cactcaataa attagagtct accatcggtc aatctagact atcgtatttg cctccggaaa 165060  
ttatgcgcaa tatcatctaa acagtatgtt gtacggaaag aaccattaca aatattatcc 165120  
atgatagaaa gaaaaatctc atatgattgg agaagtagga aacaggaaca agacgacgat 165180  
tactacatta ttaaatcatg aagtccgtat tatactcgta tatattgttt ctctcatgta 165240  
taataataaa cggaaagat atagcaccgc atgcaccatc cgatggaaag tgtaaaagaca 165300  
acgaatacaa acgccataat ttgtgtccgg gaacatacgc ttccagatta tgcgatagca 165360  
agactaacac acaatgtacg ccgtgtggtt cgggtacctt cacatctcgc aataatcatt 165420  
taccgccttg tctaagttgt aacggaagac gcgatcgtgt aacacgactc acaatagaat 165480  
ctgtgaatgc tctcccggat attattgtct tctcaaagga tcatccggat gcaaggcatg 165540  
tgtttcccaa acaaaatgtg gaataggata cggagtatcc ggagacgtca tctgttctcc 165600  
gtgtggctc ggaacatatt ctacacccgt ctcttcgca gataaatgcg aaccctgacc 165660  
cagtaatacc ttaactata tcgatgtgga aattaatctg tatccggtta acgacacatc 165720  
gtgtactcgg acgaccacta ccggtctcag cgaatccatc tcaacgtcgg aactaactat 165780  
tactatgaat cataaagact gtaatccctt cttctcgtat ggatacttct ccgttcttaa 165840

-continued

---

```

taaggtagcg acttcaggtt tctttacagg agaaaggtgt gcactctgaa tttcgagatt 165900
aaatgcaata acaaagattc ttcctccaaa cagttaacga aagcaaagaa tgatactatc 165960
atgccgcatt cgggagactgt aactctagtg ggcgacatct atatactata tagtaatacc 166020
aatactcaag actacgaaac tgatacaatc tcttatcatg tgggtaatgt tctcgatgtc 166080
gatagccata tgcccggtag ttgcgatata cataaactga tcaactaattc caaaccacc 166140
cactttttat agtaagtttt tcaccataa ataataaata caataattaa tttctcgtaa 166200
aagtagaaaa tatattctaa tttattgcac ggtaaggaag tagaatcata aagaacagta 166260
ctcaatcaat agcaattatg aaacaatata tcgtcctggc atgcatgtgc ctggcggcag 166320
ctgctatgcc tgccagtttt cagcaatcat cctcatcctc ctctcctgtg acggaagaag 166380
aaaacaaaca tcatatggga atcgatgta ttatcaaagt cacaaagcaa gaccaaacac 166440
cgaccaatga taagatttgc caatccgtaa cggaaattac agagtccgag tcagatccag 166500
atcccagagt ggaatcagaa gatgattcca catcagtcga ggatgtagat cctcctacca 166560
cttattactc catcatcggg ggaggctgga gaatgaactt tggattcacc aaatgtcctc 166620
agattaaatc catctcagaa tccgctgatg gaaacacagt gaatgctaga ttgtccagcg 166680
tgtccccagg acaaggttaag gactctcccg cgatcactcg tgaagaagct cttgctatga 166740
tcaaagactg tgagggtgtct atcgacatca gatgtagcga agaagagaaa gacagcgaca 166800
tcaagacca tccagtactc gggcttaaca tctctcataa gaaagtgagt tacgaagata 166860
tcatcggttc aacgatcgtc aatacaaaat gtgtcaagaa tctagagttt agcgttcgta 166920
tcggagacat gtgcaaggaa tcacttgaac ttgagggtcaa ggatggattc aagtatgtcg 166980
acggatcggc atctgaaggt gcaaccgatg atacttcaat catcgattca acaaaactca 167040
aagcgtgtgt ctgaaatgat aactctatc atctgaaatt ggatgagtag ggttaatcga 167100
acgattcagg cacaccaaga at                                     167122

```

```

<210> SEQ ID NO 2
<211> LENGTH: 24
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: forward primer

```

```

<400> SEQUENCE: 2

```

```

aggaacagga tcattgtcat taca                                     24

```

```

<210> SEQ ID NO 3
<211> LENGTH: 24
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: reverse primer

```

```

<400> SEQUENCE: 3

```

```

tgaactaaat gttccagatg agga                                     24

```

```

<210> SEQ ID NO 4
<211> LENGTH: 24
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: forward primer

```

```

<400> SEQUENCE: 4

```

-continued

---

 agttctgcat tcaattcggg gagt 24

<210> SEQ ID NO 5  
 <211> LENGTH: 24  
 <212> TYPE: DNA  
 <213> ORGANISM: Artificial Sequence  
 <220> FEATURE:  
 <223> OTHER INFORMATION: reverse primer

&lt;400&gt; SEQUENCE: 5

aattgtacca acggttcaag atgt 24

<210> SEQ ID NO 6  
 <211> LENGTH: 24  
 <212> TYPE: DNA  
 <213> ORGANISM: Artificial Sequence  
 <220> FEATURE:  
 <223> OTHER INFORMATION: reverse primer

&lt;400&gt; SEQUENCE: 6

tcgtttatca aactaccgt taga 24

<210> SEQ ID NO 7  
 <211> LENGTH: 189421  
 <212> TYPE: DNA  
 <213> ORGANISM: Vaccinia virus

&lt;400&gt; SEQUENCE: 7

ctgaaaggaa ataggaatag gaataggaat agtgcataa tcgtatcaca ctattgagac 60

agaaaaagaa gaagtcgoga gaggtaactt tttgtgaatg tagttaagaa ctttttgggt 120

ttgcaaaccg gaatatagtg tccggtagac ttttttaatt cgtgggtgtgc ctgaatcggt 180

cgattaaccc tactcatoca atttcagatg aatagagtta tcgattcaga cacacgcttt 240

gagttttggt gaatcgatga gtgaagtatc atcggttgca ccttcagatg cccatccgctc 300

gacatacttg aatccatcct tgacctcaag ttcagatgat tccttgcaca tgtctccgat 360

acgaacgcta aactctagat ttttgacgca ttttgtagcg acgatcggtg aaccgatgat 420

atcttcgtaa ctcactttct tatgagagat gttagaccgg agtactggat gggctcttgat 480

gtcgctgtct ttctcttctt cgctacatct gatgtcgata gacacctcac agtctttgat 540

catagcaaga gcttcttcat gagtgatcgc gggagagtc ttaccttgtc ctggggacac 600

gctggacaat ctagcattca ctgtgtttcc atcagcggat tctgagatgg atttaactctg 660

aggacatttg gtgaatccaa agttcattct cagacctcca cccgatgatgg agtaataagt 720

ggtaggagga tctacatcct cgactgatgt ggaatcatct tctgattcca cctcgggatc 780

tggatctgac tcggactctg taatttccgt tacggattgg caaatcttat cattggctcg 840

tgtttggctc tgcttttgga ctttgataat aacatcgatt cccatgatgat gtttggtttc 900

ttcttccgta caccaggagg aggatgagga tgattgctga agactggcag gcatagcagc 960

tgccgccagg cacatgcatg ccaggacgat atattgtttc ataattgcta ttgattgagt 1020

actgttcttt atgattctac ttccttaccg tgcaataaat tagaatatat tttctacttt 1080

tacgagaaat taattattgt atttattatt tatgggtgaa aaacttacta taaaaagtgg 1140

gtgggtttgg aattagtgat cagtttatgt atategcaac taccgggcat atggctatcg 1200

acategagaa cattaccac atgataagag attgtatcag ttctgtagtc ttgagtattg 1260

gtattactat atagtatata gatgtcggcc actagagtta ctgtctccga atgcccgatg 1320

atagtatcat tctttgcttt cgtaaactgt ttggaggaag aatctttggt attgcattta 1380

-continued

---

atctcgaaat tcagagtgca cacctttctc ctgtaaagaa acctgaagtt gctaccttat	1440
taaggacgga gaagtattcc tcacgaaaga cgggattaca gtctttatga ttcatagtaa	1500
tagttagtcc cgacgttgag atggattcgc tgagaccggt agtggtcgctc cgagtacacg	1560
atgtgtcggt aactggatac aggttaattt ccacatcgat atagttaaag gtatttctgg	1620
gtacgggttc gcatttatct gcggaagaga cgggtgagaa atatgttccg agaccacacg	1680
gagaacagat gacgtctccg gatactccgt atcctattcc acattttgtt tgggaaacac	1740
atgccttgca tccggatgat cctttgagaa gacaataata tccgggagag cattcacaga	1800
ttctattgtg agtcgtgtta cacgatcgcg tcttccgtta caacttagac aagcgggtaa	1860
atgattattg cgagatgtga aggtacccga accacacggc gtacattgtg tgttagtctt	1920
gctatcgcat aatctggaag cgtatgttcc cggacacaaa ttatggcgtt tgtattcggt	1980
gtctttacac tttccatcgg atgggtgatg cgggtgctata tctcttccgt ttattattat	2040
acatgagaga aacaatatat acgagtataa tacggacttc atgatttaaat aatgtagtaa	2100
tcgtcgtctt gttcctgttt cctacttctc caatcatata gatattttct ttctatcatg	2160
gataaatatt gtaatggttc tttccgtaca acatactgtt tagatgatat tgcgcataat	2220
ttccggaggc aaatacgata gcttagattg accgatggta gactctaatt tattgagtgc	2280
tttgtcagc agtctacttt tacgctccat cgatagatgg cactgttcta tgagatcgtc	2340
gtacatggga aatgaaatgt gtctgtccga atgtatggct ttaagatagc tgtgataccg	2400
tatacaggtc ggtgtcggag attcgaatct cttaaaggcg acttatgtca cgatgatgga	2460
atctatctta tcgaatgata tatttttcat aaatacactt ttatagtoct cgtttaaaca	2520
gaatttacta tgtagtctcg cgaatgactc gtcccttaat aggcagtagg ctagtatctt	2580
ttttacgtag taatcgtcgt agggagagac atcttgtaga acaacgattt aatcataggt	2640
agagatactt tcagtctgtg gtggatgatg tcattcacia catccgcctt gtatatgatg	2700
tttctgtttt caaacaccaa gtcgaatacc gtcttttagtc ggaagggtga tgtcgtatcc	2760
gatgtatgag gcaacattgt tgttacaatt ttgaaaggcg gtattatagt attcgtcttt	2820
ctgaatgtcg aacctatcta gtatagaccg tagtatattg agagtgtatc cttgattatg	2880
ttttatgaat agataaagta gatgttgtcc tttctccttt tggctcgtgcc aagtgagtaa	2940
cattatgaga atatgacctg ttgcacaatc gttccatgat ggggtgtacaa tcaagattat	3000
tacgtatcct cgagataaaa gagcatacac cacacgagga ctatgtttgg tatactgttg	3060
aaggtaagtg tgtaaccgcg ttaatgtttg ctccataatc tattatcgcg tagatgaatc	3120
gcttctcggc tcgcatctta gtgtgactta acttgtaata attgctttcg tagaacgtgg	3180
atatgtgttt acagtatgaa tgaagagaag tgagttcatc ctctcggcg caattaggg	3240
cggatccttt gtacagaacg taatagttta agctccatt gaatttatat ctaagataac	3300
acagcaatag atcggatgat ttactaaagt catcaatggg gtccgtagt atatcaaaga	3360
tcttgttatc gattgatagt ggtcatcctt gctatcaaaag ttacgcatgc cgtgggtgaa	3420
caatatcttt aatacagatg gattaaatcg tgtattcacc gtatagcaat gtaatggaga	3480
gttacctcgt ttattcagat cgcagtgttt aataactagc ttaaacagat gagacgatgt	3540
atccacatca aagaacgtga aatacatatg acagacattg ttgacagaaa cgtgaccttc	3600
attcttacgg tcgtccataa atacgttagg tataaaccac atactatcgc gaacgatgcg	3660
tacaatctcg tccatctcat aatgatttac tttttcataa ttagagatgt acgaaagaaa	3720

-continued

---

aagaaaaaga	aaaagaaaaa	cagaacaata	tattttttta	gtaatgttta	tgcgagacat	3780
ataaaataaa	ctccgtgttt	atgatgccgg	taaagtgttt	tatcatcttg	gacggaatcg	3840
atthtgaat	atgcatgga	aacaaatgaa	acaggacatt	atcgctccat	gataaattat	3900
ttaatggagt	aataaagtat	ctccatgggt	aatttcogaa	tcaagttatc	gtctgtatta	3960
atgthtcca	ctatggagtc	gatcctctca	ttgthcttta	cagthtctgt	aatgatggac	4020
gthtagtctt	thtgaacca	thtgatgtcg	gattctthtc	gtatctcaat	ctgtggcggt	4080
tgcttcgtht	aaataatata	tcaaacatgg	agacgctga	tatgtagaca	thcttcattc	4140
tattaatgtc	tgctctatag	cgctthtagt	ccttatgacg	accggcgata	tcatacttta	4200
ctthagaagg	aaaatcatca	tctaggatta	aggcgatct	gatacaggcg	aataatgggt	4260
caggatatag	atagcgtata	tctctattaa	atgcgtcaat	catagtctct	agagtgggat	4320
gthaactcag	taataaatca	actagcttcg	thtththtct	tctctgttaa	ctgctthtct	4380
ggatggccgt	atthattatc	gagcgtgaca	ctcgctccat	atthcaataa	ccgctthtga	4440
aatthtatat	tatthacatc	gaccgcgtaa	tatagtagag	thtatcgatca	tatctatatc	4500
atccatgtac	thgcttagta	tatcaaacac	atctatcagt	atgthtctcat	aacagtgata	4560
cccgaatta	thaaatctcg	ataaatcag	accgtacata	catagacggc	cattgthtga	4620
tatthgattt	acagcccggt	gtccatattt	tccacgataa	accctacgac	gthtaccatcg	4680
acgagattat	tattaacaaa	gtagctgtgc	agaggatagt	thgthtccgt	cgthcttatcc	4740
atgthtctc	cgthtatcaa	catgcattga	atgtagagta	tacttaccat	atcgccgtaa	4800
thtaagtagt	thtcaacat	ggctthgtaca	tctgthtgc	thaatctctt	thgaatgtht	4860
thgatgagth	agthgthtata	thctctggaa	thgtacgaag	thaaactacg	cattacgthc	4920
acaagagtht	gagctctctc	aataagaaga	thaacgattt	ccatgtctac	atthatatggg	4980
gthtactctaa	atcgctthgt	thgataatac	gcctctaaata	thgggctgac	gthctatact	5040
ctacacgtht	ccacatcctt	tattaataat	thaacaaatct	ctatatctat	gthtgagcaa	5100
gaccagtht	atthgagtht	thaaagatcct	cctctgthc	thccatggat	gthaacattg	5160
thtatcgatca	aacatthaat	tacatccttg	gathagagatt	gagatthctct	atgagacgat	5220
atathgtht	gagagagtht	ctthacacata	tcactgthc	acatacagtht	acgaaatacg	5280
thaacggthc	thtaaacatc	thgthtthaga	agccatagca	atactthtgg	thctcgtht	5340
ggcgtcgtht	cgthtatatc	caccaatccg	agaccattga	thgcataatt	cgthattcttg	5400
gacggacgtht	tccgthtctc	cacaattagg	tatthttagca	gacgthaacg	gathattatcc	5460
gaaacagat	cgaaatcatt	tathattcgac	thgagthtctg	thagaggaatt	cgaaatagctg	5520
gathacagtht	gathcacaaat	ctgagattht	acgthtctat	gctthactgtht	thgthcttagc	5580
ggagtht	ctctgtht	tctacaaaag	ctctcgactc	cgcgagagag	thaacgcccga	5640
acaatcttht	thgthtctc	gcatthtatt	aagacgtht	aatgthacgc	atthgthtct	5700
cgthtctct	tathgthtga	thagthtga	cacgthtcaa	tctctgtht	tatthttht	5760
tacgthc	ctthcatccag	thagcagacat	aaaatagthc	actctctacc	acaataatcc	5820
athagtht	thgthgtht	tatthctatt	tacggaaggc	aatcattcct	cathagatga	5880
thaaaagtht	agthgagag	catggaagg	atthtagtht	thacagthc	gathatgthc	5940
aagagtht	gathagctgtht	ctcgthtca	atctthtca	gcathagtht	tathgtht	6000
tactthctg	thgaagctct	tccagagacg	athagctgtht	gagthacaaag	tccaatgtht	6060
gcacgaagtht	ctthggcgtht	tthcatggag	tcatthtctga	thgaaacatt	aatgthctcc	6120

-continued

---

acgcaattgt	cccacggaag	tgaatccttc	aactcaccac	caaagagctc	cgttgcatca	6180
gttctgaaag	agatgagaag	cctgtagaga	gaccctgcgc	tttctctatg	ggtccatcta	6240
tgagaaaccc	acaggatgta	ttcagtcaga	caatgtctga	cgteggccac	ggtattcagg	6300
gagtccttag	tagcgtggca	atgacagggt	ctgaacttgg	cacaaggaga	ggccattgtg	6360
aaggtagaac	tgtagccgtc	tatgctaata	gagggcttta	atttccattt	ttttaatggg	6420
gttgtggatg	aggaatgaga	gtgatatcat	attgagatac	gtagtattgt	agagggtgat	6480
ttcctatatt	atttactttc	ggtttcataat	tttaccacct	ctttaataaa	tttcttttca	6540
cgatgcatct	tattaaatga	cgttttctca	taagtggaca	tatagatgca	aaagtaatga	6600
agaaaagtat	tacctctatc	atctacataa	ttagggctctg	ctcctttttt	taacaactta	6660
tacagtacgt	agtagtagtt	tatcggtttt	aaatcaagtc	tagaatatat	agtggaataa	6720
tatattttta	tattcgctaa	agctatctat	actatcagaa	agcatatcat	tctcaacttc	6780
atcatgagtt	aaatatttgt	gtaatggaat	gtgaccatca	ctgtcatgac	atactccttt	6840
aatagggtttt	ttaaaacaga	tgattcaaat	ccttcattca	ttagataaca	gtgtaacgga	6900
gtcgtacctt	ctactagttt	gtttatatca	cagcattcta	caaacagtct	aaacaataga	6960
gaagacggac	agactttaac	gtataaatga	cacatgttat	cgatattcgt	tgatgaatta	7020
ttatataaacg	tagttatgat	aaatgattct	aacgacatct	ctcgctagag	ataaaatcta	7080
gtatcgtatc	atactcgcac	agcatagttt	ttcataatta	atacaatatt	taaaagactt	7140
attcggaaag	tattttaata	catgtatcat	cgatggagat	ccatattgagg	agtcacttgt	7200
agttcttcag	tagtaataac	agtgcataca	tcgatagtat	aattatatgt	tgttgtaatt	7260
ggagtaactg	ttggtagttc	ttccgtgga	tcaataatta	tactaacagc	aatagtataa	7320
ttatataaat	atgttccggt	gatatacat	attttaatga	actcatttct	aacaccctca	7380
gctatatctg	tccaattaaa	tgtagccaac	aatctactac	gttctctttg	attgactact	7440
tgtacggtag	cgacgctaca	ctatctttat	tgtctcttac	atgctccaat	tgaatgtcat	7500
gatacaacgc	agttttctct	atgcatgttt	cataaacacca	cgaacatgtc	gcagtaagat	7560
aatctctgta	aattcatgat	tgcgggtcat	aaacaagccc	gtcaataatt	gtggctatat	7620
atcagttta	tagagcaaaa	taattaagca	caatagcgtc	taatctcaaa	atagttatg	7680
tttatttttt	tcatatataa	catactgggt	aaaatcctct	aaaggctgat	cttcatctat	7740
aaatcaagat	cataattaca	tttagacagt	ggtttcatgt	ttataaaaat	gttctttttg	7800
tgtgaataag	gaatatacta	atcaataatc	aaccatcgac	cccattacga	tagtatgcag	7860
gcaaccccc	attagagagg	tacgtgtaat	cagtctctcc	agtttttagta	tttttataag	7920
tcattgttac	ataaacggct	tttaaacagt	ctcctcgata	ataagccata	tctggaaatt	7980
tattaaatac	tcgagtcatt	ttacgcacgg	tcaaaaaagt	aagtaatgtc	gacgacttct	8040
tacattctat	agaaacacct	agaatactca	ttttcttttg	gaaaatatcc	tcagactctg	8100
atttgaacaa	tgcacgacct	atagtaaacc	gtgaccaata	agttatatta	gtcaatggta	8160
tatccaaaacc	atcagggtgtg	gatagtacgc	cgatagtcca	gtctttggta	tcgatagtgt	8220
agttattgaa	ctgagaagtt	accgtatagt	ctttttggtc	atctctaaac	aaggaaacta	8280
atacctctac	actattgaac	gatttatctt	ccgtaatggg	tggaataacg	ggaatataaa	8340
gtggactagc	gatggatgaa	gtcacgaata	taagacacgc	tattaatccg	tatatcatca	8400
ttttgatatt	acttataata	acgatttggt	taatttttag	tttatactat	taattgtaaa	8460

-continued

---

tgatattatt	atTTTTTTTT	aagtattatc	agcttttagtt	tatactatta	ctatttgtaa	8520
tatttagaca	tagataaacg	tgataaaagt	ctatttgttt	atattttattg	cggatagcag	8580
tatttccta	taaaaagtat	acgtcctgtg	ttgtctttaa	tcatgtacat	gaatggatgg	8640
tttatgtaga	ccttcgtacg	atataccatc	gaaaagttag	tcataaatac	tcctgtaacg	8700
gccgatgctt	ctgtatactc	ctcattaaca	tctataaacg	tcgtatgtag	aaatTTTTct	8760
acagtgatag	tttcattaca	catcttgcta	aaatctgcat	aatatccgaa	tatattagta	8820
agtcctaaat	tttctaaaat	cggtagcaga	ttatacggtt	ctgtcatttc	cactTTaaac	8880
tttggcatat	acaagtctat	actTTTTagta	gataacatac	cacaccattt	tttaaatttt	8940
tcactctgta	tattTTTTtc	tatgttatat	ataccttcta	tgctgctcgg	tagtataatt	9000
accatactag	agtttccctc	gtatggaata	tcgataatag	agaatcctcc	gaataattca	9060
ttaatatgta	catattgcaa	gttattctcg	gtacccacca	tcatatcaac	gctggtaact	9120
atattcttag	aaatataaaa	cttgtctgta	tatgtaagat	gtttagaaaa	tggatatttc	9180
cacattgctt	taaaatggac	ggcgttaaca	actgtcatac	gagtattaat	ggatagcggg	9240
ctagtcaata	aggaattaat	tttaccattt	gtcattgtct	taaccattc	gttgattagt	9300
tcctttgttt	ggttagcatt	attaaagttt	acagtttgaa	aatcgtcttt	tattTTTTgt	9360
aggaaggagg	catggaactc	gatactatcg	ctaccgtata	ttttatttgc	ggtagctagt	9420
gtcgcacaat	acggaatatc	tacgtccatg	tcattattgt	catcgggtgt	attctcattc	9480
atattctcta	tatattttga	tagttgttca	gctgtagaac	cagctgctcc	atgatttaga	9540
atagataaag	tagataaaat	agaaactgga	gaaatcaaaa	cattttcctc	agggtgtttt	9600
acgattagtt	ctttaaagat	atccatggta	tagaccaaac	aataacgata	acgatatata	9660
tcataaataa	ataatgttaa	atttcagttt	atgtttgtac	cccgatttca	tacttaacaa	9720
attggtattg	cgtacacaat	caatcatatt	acataccatt	aataatgcaa	gcataaaaaa	9780
tcggttagtag	atgtttctaa	atataagttc	cgtaagcaaa	gaatataaga	atgaagcggg	9840
aatgataaaa	tcaattgtta	tctaaaatga	tcatactcat	ttattttatt	ctatttatatt	9900
aacacataca	tttttaacag	caacacattc	aatattgtat	tgttattttt	atattattta	9960
cacaattaac	aatatattat	tagttttatat	tactgaatta	ataatataaa	attccaatc	10020
ttgtcataaa	cacacactga	gaaacagcat	aaacacaaaa	tccatcaaaa	atgttgataa	10080
attatctgat	gttgtgttcc	gctgctatga	taatcagatc	attcgcgat	agtggtaacg	10140
ctatcgaaac	gacatcgcca	gaaattacaa	acgtacaac	agatattcca	gctatcagat	10200
tatgcggtcc	agagggagat	ggatattggt	tacacgggtga	ctgtatccac	gctagagata	10260
ttgacggtat	gtattgtaga	tgctctcatg	gttatacagg	cattagatgt	cagcatgtag	10320
tattagtaga	ctatcaacgt	tcagaaaaacc	caaacactac	aacgtcatat	atcccatctc	10380
ccggtattat	gcttgatta	gtaggcatta	ttattattac	gtgttgctca	ttatctgttt	10440
ataggttcac	tcgacgaact	aaactactta	tacaagatat	ggttggtgcca	taatttttat	10500
aaatTTTTtt	tatgagtatt	tttcaaaaa	tgtataaagt	gtatgtotta	tgtatattta	10560
taaaaatgct	aaatatgoga	tgtatctatg	ttatttgtat	ttatcTaaac	aatacctcta	10620
cctctagata	ttatacaaaa	atTTTTtatt	tcggcatatt	aaagtaaaa	ctagttacct	10680
tgaaaatgaa	tacagtgggt	ggttccgtat	caccagtaag	aacataatag	tcgaatacag	10740
tatccgattg	agattttgca	tacaactacta	gtctagaaa	aaatttgtaa	tcattttctg	10800
tgacgggagt	ccatataatct	gtatcatcgt	ctagtttatc	agtgTcccat	gctatattcc	10860

-continued

---

tgttatcatc attagttaat gaaaataact ctcgtgcttc agaaaagtca aatattgtat 10920  
 ccatacatac atctccaaaa ctatcgctta tacgtttatc tttaacgata cctataccta 10980  
 gatggttatt tactaacaga cattttocag atctattgac tataactcct atagtttcca 11040  
 catcaaccaa gtaatgatca tctattgtta tataacaata acataactct tttocatttt 11100  
 tatcagtatg tatactata tcaacgtcgt cgttgtagtg aatagtagtc attgatctat 11160  
 tatatgaaac ggatattgtct agaacggcaa ttgttttaac tcacagttaac actttctttg 11220  
 atttaaagtc tagagtcttt gcaaacataa tatecttate cgactttata tttcctgtag 11280  
 ggtggtataa ttttattttg cctccacata tcggtgtttc caaatatatt actagacaat 11340  
 attccatata gttattagtt aagggtacc c aattagaaca cgtacgctta ttatcatcat 11400  
 ttggatcgta tttcataaaa gttattgtac tategatgac aacacattct acatttttta 11460  
 atcgtctata tagtattttt ctgatatttt ctataatate agaattgtct tccatcggaa 11520  
 gttgtatact atcggaaatca gttacatggt taaataattc tctgatgtca ttccttatac 11580  
 aatcaaatc attattaaac agtttaatag tctgtagacc tttattgtcg taaatatcca 11640  
 ttgtcttatt agttacgctt atttttatgt gttttacgtt gctttattat attttataag 11700  
 aatgattggt tgacgaatca cgagaactat taagacacat tattaggtat atattataaa 11760  
 aaagttttg attacgatgt tataagagga aagaggacac attaacatca tacatcaatt 11820  
 aactacattc ttataacate gtaatcaaaa gaattgcaat tttgatgtat aacaactgtc 11880  
 aatgggttat ggaattgtat attacatatt atacggtagt ttggtaacga caaataccgg 11940  
 tcggttaattg tctgccggtg taatagaatt atatatatct atctattaca ccggccttgt 12000  
 atacataata ataagttgtg gtagtatgat ctccatattt ataatttagg actttgtatt 12060  
 cagtattttt ggaatcataa aaaataaaaa aaagttttac taatttataa tttaaaaagt 12120  
 atttacattt ttttactgt ttagtgcggg atatggaatt cgatcctgcc aaaatcaata 12180  
 catcatctat agatcatgta acaatattac aatacataga tgaaccaa at gatataagac 12240  
 taacagtatg cattatccga aatattaata acattacata ttatatcaat atcacaaaa 12300  
 taaatacaca tttggctaat caatttcggg ctgggaaaa acgtatcggc ggaagggact 12360  
 atatgactaa cttatctaga gatacaggaa tacaacaatc aaaacttact gaaactatac 12420  
 gtaactgtca aaaaaataga aacatatatg gtctatatat acactacaat ttagttatta 12480  
 attggataac cgatgtgatt gttcaatcaa tattaagagg gttggtaaat tggtagatag 12540  
 ctaataatc ctatactcca aatacacca ataatacaac aaccatttct gagttggata 12600  
 tcatcaaaa actggataaa tacgaggacg tgtatagagt aagtaaagaa aaagaatgtg 12660  
 gaatttgcta tgaagttggt tactcaaac gatagatact ttggtttatt ggattcgtgt 12720  
 aatcatatat tttgcataac atgtatcaat atatggcata gaacacgaag agaaaccggt 12780  
 gcgtcggata attgtctat atgcccgtacc cgttttagaa acataacaat gagcaagttc 12840  
 tataagctag ttaactaata aataaaaaagt ttaatttggt gacgacgtat gtcgttattt 12900  
 tttctcgtat aaaagattaa tttgattcta atataatctt tagtattgga taaatatcaa 12960  
 ttcaaattaa ttccattaga ttatatcata aataaaaaata gtagcagca ctacttcagc 13020  
 caaatattct ttttgaaac gccatctate gtagtgagga cacaagtga cctataatta 13080  
 tcaaatttat tagtatcagt cacatgaagg actttctgta gagtgacgat tccactatct 13140  
 gtggtacgaa cggtttcatc ttctttgatg ccaatccca gatgttctat aaacttggt 13200

-continued

---

tctcgtccg	atttcatac	ctttgctaac	caatacatat	agctaaactc	aggcatatgt	13260
tccacacac	ctgaacaatg	aaattctcca	gaagatgtta	caatgtctag	atttggacat	13320
ttggtttcaa	ccgcttaac	atatgagtga	acacacccat	acatgaaagc	gatgagaaat	13380
aggattctca	tcttgccaaa	atatcactag	aaaaaattta	tttatcaatt	ttaaaggat	13440
aaaaaact	tattgttgct	cgaatatttt	gtatttgatg	gtatacggaa	gattagaaat	13500
gtaggtatta	tcatacaactg	attctatgg	tttatgtatt	ctatcatggt	tcaactattgc	13560
gttggaaata	atatcatatg	cttccacata	tattttattt	tgttttaact	cataaactc	13620
acgtaattct	ggattattgg	catatctatg	aataatttta	gctccatgat	cagtaaatat	13680
taatgagaac	atagtattac	cacctaccat	tatttttttc	atctcattca	attcttaatt	13740
gcaaagatct	atataatcat	tatagcgttg	acttatggac	tctggaatct	tagacgatgt	13800
acagtcactc	ataatcatgg	catatttaat	acattgtttt	atagcatagt	cgttatctac	13860
gatgttagat	atttctctca	atgaatcaat	cacataatct	aatgtagggt	tatgacataa	13920
tagcattttc	agcagttcaa	tgtttttaga	ttcgttgatg	gcaatggcta	tacatgtata	13980
tccgttattt	gatctaagt	tgacatctga	accggattct	agcagtaaag	atactagaga	14040
ttgtttatta	tatctaacag	ccttgtgaag	aagtgtttct	cctcgtttgt	caatcatggt	14100
aatgtcttta	agataaggta	ggcaaatggt	tatagtacta	agaattgggc	aagcataaga	14160
catgtcacia	agaccctttt	tgtatgtata	agtgtaaaaa	ttataacatc	catagttgga	14220
tttacaatag	tgtccaatcg	ggatctctcc	atcatcgaga	taattgatgg	catctccctt	14280
ccttttttag	tagatatttc	atcgtgtaag	aatcaatatt	aatatttcta	aagtatccgt	14340
gtatagcctc	tttatttacc	acagttccat	attccactag	agggatatcg	ccgaatgtca	14400
tatactcaat	tagtatatgt	tggaggacat	ccgagttcat	tgttttcaat	atcaaagaga	14460
tggtttcctt	atcatttctc	catagtggta	caatactaca	cattatttctg	tgcggctttc	14520
cattttccaa	aaacaatttg	accaaactca	aatctacatc	tttattgtat	ctataatcac	14580
tatttagata	atcagccata	attactcgag	tgcaacatgt	tagatcgtct	atatatgaat	14640
aagccgtggt	atctattcct	ttcattaaca	atttaacgat	gtctatatct	atagagatg	14700
acttaataata	atattgaaga	gctgtacaat	agtttttctc	tataaaagac	ggcttgattc	14760
cgtgattaat	tagacattta	acaacttccg	gacgcacata	tgctctcgta	tccgactctg	14820
aatacagatg	agagatgata	tacagatgca	atcgggtacc	gcaatttctg	agttgataat	14880
catcatacgc	gtatcagtac	tcgtcctcat	aaagaacact	gcagccattt	tctatgaaca	14940
aatcaataat	tttaggaaca	ggatcattgt	cattacataa	ttttctataa	ctgaacgatg	15000
gttttcacat	ttaacactca	agtcaaatcc	atgttctacc	aacaccttta	ttaagtcaac	15060
gtctacattt	ttggatttca	tatagctgaa	tatattaag	tcatttatgt	tgctaaatcc	15120
agtggtctct	agtagagcca	tcgctatata	ctttaacttt	aacatgtcta	ctatttgggt	15180
attcttctaa	tggggtagct	gtctccaatt	tttgcgtaat	ggattagtgc	cactgtctag	15240
tagtagtttg	acgacctoga	cattattaca	atgctcatta	aaaaggtatg	cgtgtaaagc	15300
attattcttg	aattggttcc	tggatcatt	aggatctctg	tctttcaaca	tctgtttaag	15360
ttcatcgaga	gccacctcct	cattttccaa	atagtcaaac	attttgactg	aatgagctac	15420
tgtgaactct	atacaccoc	acaactaatg	tcattaaata	tcatgtcaaa	aacttgta	15480
attattaata	aaaataattt	agtgtttaaa	ttttaccagt	tccagatttt	acacctccgt	15540
taatacctcc	attaaccoca	ctggacgatc	ctcctcccca	cattccaccg	ccaccagatg	15600

-continued

---

tataagtttt	agatccttta	ttactacat	catgtocatg	gataaagaca	ctccacatgc	15660
cgccactacc	ccctttagaa	gacatattaa	taagacttaa	ggacaagttt	acaataaaaa	15720
ttaatcacga	gtaccctact	accaacctac	actattatat	gattatagtt	tctattttta	15780
cagtaccttg	actaaagttt	ctagtccaaa	gagcaatact	accaacctac	actattatat	15840
gattatagtt	tctattttta	taggaacgcg	tacgagaaaa	tcaaatgtct	aattttctaac	15900
ggtagtgttg	ataaacgatt	atcgtcaatg	gataacctct	ctatcatgtc	gtctattttc	15960
ttactttggt	ctattaactt	attagcatta	tatattatgt	gattataaaa	cttatattgc	16020
ttattagccc	aatctgtaaa	tatcggatta	ttaacatata	gtttctttgt	aggtttattt	16080
aacttgtaaa	tcactgtaag	catgtcctta	ccatttattt	taatttgacg	catatccgca	16140
atctcttttt	cgcagtcggt	tataaattct	atataatgat	gatacatgct	acatgtgtac	16200
ttataatcga	ctaataatgaa	gtacttgata	catatttcca	gtaacgattt	attattacca	16260
cctatgaata	agtacctgtg	atcgtctagg	taatcaactg	ttttcttaat	acattcogatg	16320
gttggttaatt	tactcagaat	aatttccaat	atcttaatat	ataattctgc	tattttctggg	16380
atataattat	ctgccagtat	aacacaaata	gtaatacatg	taaaccata	ttttgttatt	16440
atattaatgt	ctgcgccatt	atctattaac	catttctaata	ggctgacact	atgcgactca	16500
atacaatgat	aaagtatact	acatccatgt	ttatctatgt	tgtttatata	atcaatatac	16560
ggcttataaaa	gttttagtat	cgataacaca	tccaactcac	gcatagagaa	ggtagggaaat	16620
aatggcataa	tatttatttag	gttatcatca	ttgtcattat	ctacaactaa	gtttccattt	16680
tttaaaatat	actcgacaac	tttaggatct	ctattgcaa	atttttgaaa	atatttattt	16740
atatacttaa	atctatataa	tgtagctcct	tcatcaatca	tacatttaata	aacattgatg	16800
tatactgtat	gataagatac	atattctaac	aatagatctt	gtatagaatc	tgtatatctt	16860
ttaagaattg	tggatatttag	gatattatta	cgtaaaactat	tacacaattc	taaaatataa	16920
aacgtatcac	ggtcgaataa	tagttgatca	actatataat	tatcgatttt	gtgatttttc	16980
ttcctaaact	gtttacgtaa	atagtttagat	agaatattca	ttagttcata	accactatag	17040
ttactatcga	ataacgcgtc	aaatatttcc	cgtttaatat	cgcattttgc	aagataataa	17100
tagagtgtgg	tatgttcacg	ataagtataa	taacgcactc	ctttttcgtg	tgaattataa	17160
tagtttatca	cgtccaaaga	tgtagcataa	ccatcttgtg	acctagtaat	aatataataa	17220
tagagaactg	ttttaccocat	tctatcatca	taatcagttg	tgtaatcgta	atcgtaatcg	17280
tctaattcat	catcccaatt	ataatattca	ccagcacgtc	taatctgttc	tattttgatc	17340
ttgtatccat	actgtatggt	gctacatgta	ggtattcctt	tatccaataa	tagtttaaac	17400
acatctacat	tgggatttga	tgtttagcgt	tatttttcta	caatattaat	accatttttg	17460
atactattta	ttctatacc	tttcgaaatt	agtaatttca	ataagtctat	atcgatgtta	17520
ttagaacata	gatattcga	tatatcaaaa	tcattgatat	ttttatagtc	gactgacgac	17580
aataacaaaa	tcacaacatc	gtttttgata	ttattatttt	tcttggtaac	gtatgccttt	17640
aatggagttt	caccatcata	ctcatataat	ggatttgcac	cactttctat	caatgattgt	17700
gcactgctgg	catcgatggt	aaatgtttta	caactatcat	agagtatctt	atcgtaaac	17760
atgattgggt	gttgatgcta	tcgcattttt	tggttctctt	catttcagtt	atgtatggat	17820
ttagcacggt	tgggaagcat	gagctcatal	gatttcagta	ctgtagtgc	agtactatta	17880
gtttcgatca	gatcaatgtc	tagatctata	gaatcaaac	acgataggtc	agaagataat	17940

-continued

---

```

gaatatctgt acgcttcttt ttgtactgta acttctgggt ttgttagatg gttgcatcgt 18000
gctttaacgt caatggtaca aattttatcc tcgctttgtg tatcatattc gtctctacta 18060
taaaattgta tattcagatt atcatgagat gtgtatacgc taacggatc aataaacgga 18120
gcacaccatt tagtcataac cgtaatccaa aaatttttaa agtatatctt aacgaaagaa 18180
gttgtgcat tgtctacggg gtatgggtact agatcctcat aagtgtatat atctagagta 18240
atgtttaatt tatcaaatgg ttgataatat ggatcgtcgt ggcaatttcc taagacgaaa 18300
ataagacata aacacgcaat aaatctaac gaagacatgg ttactcctta aaaaaatcgt 18360
aataatcacc ttggctatth agtaagtgtc atttaacact atactcatat taatccatgg 18420
actcataatc tctatacggg attaacggat gttctatata cggggatgag tagttctctt 18480
ctttaacttt atacttttta ctaatcatat ttagactgat gtatgggtaa tagtgtttga 18540
agagctcgtt ctcacatca gaataaatca atatctctgt ttttttgta tacagatgta 18600
ttacagctc atattatcag taatagaacg tgatcatctac cttattaact ttcaccgcat 18660
agttgtttgc aaatcagggt aatcctttga cctcgtcgtt tcccgaccaa tctgggcgta 18720
taatgaatct aaactttaat ttcttgtaat cattcgaat aatttttagt ttgcatccgt 18780
agttatcccc tttatgtaac tgtaaatttc tcaacgcgat atctccatta ataatgatgt 18840
cgaattcgtg ttgtataccc atactgaatg gatgaacgaa tatcaacggc gttaatagta 18900
atctactttt tcactcttac atattgggta ctagtthttac tatcataagt ttataaattc 18960
cacaagctac tatggaataa gccaacctac ttagtataac acacatgtct taaagtttat 19020
taattaatta catgttgttt tatatatcgc tacgaattta aacagagaaa tcagttagg 19080
aaaaaaaaat atctatctac atcatcacgt ctctgtattc tacgatagag tgctacttta 19140
agatgagaca tatccgtgtc atcaaaaaata tactccatta aaatgattat tccggcagcg 19200
aacttgatg tggatatatc acaacctttg ttaatatcta cgacaataga cagcagtcct 19260
atggttccat aaacagtgag tttatcttcc tttgaagaga tattttgtag agatcttata 19320
aaactgtcga atgacatcgc atttatattt ttagctaaat cgtatatgtt accatcgtaa 19380
tatctaaccg cgtctatctt aaacgtttcc atcgctttaa agacgtttcc gatagatggt 19440
ctcatttcat cagtcatact gagccaacaa atataatcgt gtataacatc tttgatagaa 19500
tcagactcta aagaaaacga atcggtttha ttatacgcgt tcatgataaa cttaatgaaa 19560
aatgttttcc gttgtttaag ttggatgaat agtatgtctt aataattgtt attatttcat 19620
taattaatat ttagtaacga gtacactcta taaaaacgag aatgacataa ctagtatca 19680
aagtgcttag gacgcgtaat tttcatatgg tatagatcct gtaagcattg tctgtattct 19740
ggagctatth tctctatcgc attagtgagt tcagaatatg ttataaattt aaatcgaata 19800
acgaacataa ctttagtaaa gtcgtctata ttaactcttt tattttctag ccatcgtaat 19860
accatgttth agatagtata ttctctagtt actacgatct catcgttgtc tagaatatca 19920
catactgaat ctacatccaa ttttagaaat tggctgtgtg tacatatctc ttctatatta 19980
ttgttgatg attgctgtag aaaactatta cgtagaccat tttctttata aaacgaatat 20040
atagtactcc aattatcttt accgatatat ttgcacacat aatccattct ctcaatcact 20100
acatctttaa gattttcgtt gtttaagatat ttggctaaac tatataatc tattagatca 20160
tcaacagaat cagtatatat tttcttagat ccaaagacga actctttggc gtcctctata 20220
atattcccag aaaagatatt ttcgtgtttt agtttatcga gatctgatct gttcatatac 20280
gccatgattg tacggtaoct tatgataacc gcataaata aaaaatccatt ttcattttta 20340

```

-continued

---

accaatacta ttcataattg agattgatgt aatactttgt tactttgaac gtaaagacag 20400  
 tacacggatc cgtatctcca acaagcacgt agtaatcaaa tttgggtgtg ttaaacttcg 20460  
 caatattcat caatttagat agaacttat actcatcacc tggtttagga atccatgtat 20520  
 tattaccact tccaactta tcattatccc aggetatggt tegtccatca tegtgtgcga 20580  
 gagtgaataa ttcttttgta ttcggtagtt caaatatatg atccatgcat agatcggcaa 20640  
 agctattgta gatgtgattt ttccataaac taatataaaa ctctgttact agcaaacact 20700  
 ttctgtattt atcaaccaag acacatatgg tttctaaatc tatcaagtggt tggggatcca 20760  
 tagttatgac gcagtaacat atattattac attcttgact gtcgctaata tctaaatatt 20820  
 tattgttacc gtattggatt ctgcatatag atggcttgta tgcataagat atagaacaca 20880  
 taaccaatth atagtcgctc ttacattct cgaatctaaa gttaagagat ttagaaaaca 20940  
 ttatatcttc ggatgatggt atcactggtt ctggagtagg atatattaaa gtctttacag 21000  
 atttcgctcg attcaataa atcactaaat aatatccacc attatcatct gtttagagtag 21060  
 tatcattaaa tctattatat tttatgaaag atatatcact gtcacacct atatttcgta 21120  
 cttttttaa ctgtttgat aatctctc tgatacaatc agatatact attgtgtcgg 21180  
 tagacgatc cgttacattt gaattaatgg tgttccattt tacaactttt aacaagtga 21240  
 ccaattcatt tctaatagta tcaactctc catgattaaa tattttaata gtatccattt 21300  
 tatatcacta cggacacaaa gtactgaca taaaccattg tataattttt atgttttatg 21360  
 tttattagcg tacacatttt ggaagtccg gcttccatgt atttccctga gagcaagtag 21420  
 atgatgagga accagatagt ttatatcctg acttgcaact aaagtctaca ttgtcgtgtg 21480  
 atgagtatga tcttttaaac ccgctagaca agtatccgtt tgatattgta ggatgtggac 21540  
 atttaacaat ctgacacgtg ggtggatcgg accattctcc tccctgaacac aggacaccag 21600  
 agttaccaat caacgaatat ccactattgc aactataagt tacaacgctc ccatcggtat 21660  
 aaaaatctc gtatccgta tgtcttccgt tggatataga tggaggggat tggcaattta 21720  
 cagattcaca aataggtgct tccggattcc ataccataga tccagtagat cctaattcac 21780  
 aatacgtatt agattcacg atcaaatgat atccgctatt acaagagtag gttatactag 21840  
 agccaaagtc tactccacca atatcaagtt ggccattatc gatatctcga ggcgatgggc 21900  
 atctccgttt aatacattga ttaagagtg tccatccagt acctgtacat ttagcatata 21960  
 taggtcccat tttttgcttt ctgtatccag gtagacatag atattctata gtgtctccta 22020  
 tgttgtaatt agcattagca tcagtctcca cactattctt aaatttcata ttaatgggtc 22080  
 gtgacggaat agtacagcat gatagaacgc atccattccc caacaatgct aggaacgtca 22140  
 cgctctccac cttcatatth atttatcctg aaaaatgta tccctggacat cgtacaaata 22200  
 ataaaaagcc catatatggt cgctattgta gaaattggtt ttcacagttg ctcaaaaacg 22260  
 atggcagtg cttatgagtt acgttacact ttggagtctc atctttagta aacatatcat 22320  
 aatattcgat attacgagtt gacatatcga acaaatcca agtatttgat tttggataat 22380  
 attcgtatth tgcactgct ataattaaga tataatcacc gcaagaacac acgaacatct 22440  
 ttctacatg gttaaagtac atgtacaatt ctatccattt gtcttcctta actatatatt 22500  
 tgtatagata attacagtc tctgagtaa ttccagtaat tacatagatg tgcgcgtcgt 22560  
 actctacagc ataaactata ctatgatgct taggcattgg agactttttt atccaacgat 22620  
 ttttagtgaa acattccaca tegttaata ctacatattt ctacacgtg gtataaactc 22680

-continued

---

caccattac atatataca tegtttacga ataccgacgc gcctgaatat ctaggagtaa 22740  
ttaagtttgg aagtottatc catttogaag tgccgtgttt caaatattct gccacacccg 22800  
ttgaaataga aaatttcaat cctcctatta catataactt tccatcgta acacaagtac 22860  
taacttctga ttttaacgac gacatattag taaccgtttt ccattttttc gttttaagat 22920  
ctaccgcga tacggaataa acatgtctat tgtaaatcat gccgccaata atgtatagac 22980  
aattatgtaa aacatttga ttatagaatt gtctatctgt attaccgact atcgtccaat 23040  
attctgttct aggagagtaa tgggttattg tggatataata atcagagttt ttaatgacta 23100  
ctatattatg ttttatacca tttcgtgtca ctggctttgt agatttggat atagttaatc 23160  
ccaacaatga tatagcattg cgcatagtat tagtcataaa cttgggatgt aaaatgttga 23220  
tgatatctac atcgttttga tttttatgta tccactttaa taatatacata gctgtaacat 23280  
cctcatgatt tacgttcaacg tcttcgtggg ataagatagt tgtcagtca tcctttgata 23340  
atthtccaaa ttctggatcg gatgtcaccg cagtaaatatt gttgattatt tctgacatcg 23400  
acgcattata tagtttttta attccatata ttttagaaaa gttaaacatc cttatacaat 23460  
ttgtgaaatt aatattatga atcatagttt ttacacatag atctactaca ggcggaacat 23520  
caattattat ggcagcaact agtatcattt ctacattggt tatgggtgatg tttatcttct 23580  
tccagcgc atagtctaat agcgattcaa acgctgata gtttatacca ttcaataata 23640  
tcgcttcac ctttagatgg tgatcctgaa tgcgtttaaa aaaattatac ggagacgccc 23700  
taataatttc cttattcact tgtataattt cccattgat agaaaatata acgctttcca 23760  
ttcttaaagt actataagta attatagat aatgtaaacg tttatatatt caatattttt 23820  
ataaaaatca ttttgacatt aattcctttt taaatttccg tctatcatct atagaaacat 23880  
attctatgaa tttataaaat gcttttacgt gtcctatcgt aggcgataga accgctaaaa 23940  
agcctattga atttctaaa aagaatctgt tatatggtat agggagagta taaaacatta 24000  
aatgtcgcga cttattaag tattcagtag ccaatcctaa ctctttcgaa tacttattaa 24060  
tggtcttctg tctgtacgaa tctatttttt tgaacaacgg acctagtggg atatcttctt 24120  
ctatgtatct aaaataatgt ctgactagat ccgttagttt aatatccgca gtcactctgt 24180  
ctagaatggc aaatctaact gcgggttttag gcttttagttt agtttctata tctacatcta 24240  
tgtctttatc taacacaaa aatataatag ctaaatattt attacaatca tccggatatt 24300  
cttctacgat ctcactaaact aatgtttctt tggttatact agtatagtca ctatcggaca 24360  
aataaagaaa atcagatgat cgatgaataa tacattttaa ttcacatct gtaagatttt 24420  
tgagatgtct cattagaata ttattagggg tagtactcat tatcattcgg cagctattac 24480  
ttattttatt atttttcacc atatagatca atcattagat catcaaaata tgtttcaatc 24540  
atcctaaaga gtatgggtgaa tgactcttcc catctaattt ctgaacgttc accaatgtct 24600  
ctagccactt tggcactaat agcgcattc cgttagcgt cttctatatt attaactggt 24660  
tgattcaatc tatctagcaa tggaccgtcg gacagcgtca ttctcatggt cttaatcaat 24720  
gtacatacat gcgcgtcacc taccaattca tccaacaaca taagcttttt aaaatcatca 24780  
ttataatagg tttgatcgtt gtcattttct caaagaatat atctaataag tagagtcctc 24840  
atgcttagtt aacaactatt ttttatgtta aatcaattag tacaccgcta tgtttaatac 24900  
ttattcatat tttagttttt aggattgaga atcaatacaaaa aaaattaatg catcattaat 24960  
tttagaaata cttagtttcc acgtagtcaa tgaaacattt gaactcatcg tacaggacgt 25020  
tctcgtacag gacgtaacta taaaccggtt tatatttgtt caagatagat acaaatccga 25080

-continued

---

taactttttt	tacgaattct	acgggatcca	ctttaaaagt	gtcataccgg	gttcttttta	25140
tttttttaaa	cagatcaatg	gtgtgatgtt	gattaggtct	tttacaatt	tgatatagaa	25200
tagcgtttac	atattctcca	taatggtaa	tcgccatttg	ttcgtatgtc	ataaattctt	25260
taattatatg	acactgtgta	ttgtttagtt	catccttggt	cattgttagg	aatctatcca	25320
aaatggcaat	tatactagaa	ctataggtgc	gttgatata	catattgatg	tgtctgttta	25380
tacaatccat	gatatttggg	tccatgctac	taccttcggg	taaaattgta	gcatcatata	25440
ccatttctag	tacttttagt	tcattattat	ccattgcaga	ggacgtcatg	atcgaatcat	25500
aaaaaaat	attattttta	tgttattttg	ttaaaaata	tcatogaata	cttctgaaga	25560
tactccttca	tgaacataat	cagttacaaa	acgtttatat	gaagtaaagt	atctacgatt	25620
tttacaaaag	tccggatgca	taagtacaaa	gtacgcgata	aacggaata	taatagattt	25680
atctagtcta	tctttttcta	tagctttcat	agttagatac	atggtctcag	aagtaggatt	25740
atgtaacatc	agcttcgata	aaatgactgg	gttatttagt	cttacacatt	cgctcataca	25800
tgtatgaccg	ttaactacag	agtctacact	aaaatgattg	aacaatagat	agtctacat	25860
tgtttcgtat	tcagatagta	cagcgtagta	catggcatct	tcacaaatta	tatcattgtc	25920
taatagatat	ttgacgcac	ttatggatcc	cacttcaaca	gccatcttaa	aatcggtaga	25980
atcatattgc	tttcttttat	cattaataat	ttctagaaca	tcatctctat	cataaaagat	26040
acaaatatta	actgtttgat	ccgtaataac	attgctagtc	gatagcaatt	tgtaataag	26100
atgcgctggg	ctcaatgtct	taataagaag	tgtaagagga	ctatctccga	atttgttttg	26160
tttattaaca	tccgttgatg	gaagtaaaag	atctataaat	tctacattct	tgactgtttt	26220
agagcataca	atatggagag	gtgtatttcc	atcatgatct	ggttttgagg	gactaatcc	26280
tagtttcatc	atccatgaga	ttgtagaagc	ttttggattg	tctgacataa	gatgtctatg	26340
aatatgattt	ttgcaaaatt	tatccactat	cctggcttcg	aatccgatgg	acattatttt	26400
tttaaacact	ctttctgaag	gatctgtaca	cgccaacaac	ggaccacatc	cttcttcatc	26460
aaccgagttg	ttaatcttgg	ctccactactg	taccaataaa	tttattctct	ctatgacttc	26520
atcatctggt	cccagagagat	aatatagagg	cgttttatgc	tgtttatcac	acgcgtttgg	26580
atctgcgcgc	tgcgtcagca	gcatcgcgac	tattctatta	ttattaattt	tagaagctat	26640
atgcaatgga	taatttccat	catcatccgt	ctcatttggg	gagtatctct	tatgaagaag	26700
ttcttcgaca	aatcgttcat	ctagtccttt	aattccacaa	tacgcgatga	gaatgtgata	26760
attatttcca	gaaggttoga	tagctttag	catattccta	aatacatcta	aatttttact	26820
attatatttg	gcataaaagag	atagataata	ctcggccgac	ataatgttgt	ccattgtagt	26880
ataaaaatta	atatttctat	ttctgtatat	ttgcaacaat	ttactctcta	taacaaatat	26940
cataacttag	ttcttttatg	tcaagaaggc	actggtttag	ttcatctata	aatgtcacgc	27000
cataactacc	acgcatgcca	tactcagaat	tatgataaag	atatttatcc	ttggggtgta	27060
ggtaatgggg	attaatcttt	gttggatcag	tctctaagtt	aacacatgtc	acacatgatc	27120
catttatagt	tatatcacac	gatgatgatt	tatgaattga	ttccggaaga	tcgctatcgt	27180
atthtgggt	tccacaattc	atthccatac	atgthattgt	cacactaata	ttatgatgaa	27240
ctttatctag	ccgctgagtg	gtaacaaca	gaacagatag	tttattatct	ttaccaacac	27300
cctcagccgc	tgccacaaat	ctctgatccg	tatccatgat	ggctatgttt	atthctagtc	27360
cgtatccagt	caacactatg	ttagcatttc	tgtcgaata	gctthcactc	atatgacact	27420

-continued

---

caccaataat agtagaatta atgtcgtaat ttacaccaat agtgagttcg gcggcaaagt 27480  
 accaataccg gtaatcctgt cgaggaggac ataatgtatt cttgtattct actgaatacc 27540  
 cgagagatgc gatacaaaag agtaagacta atttgtaaac catcttactc aaaatatgta 27600  
 acaatagtac gatgcaatga gtaagacaat aggaaatcta tcttatatac acataattat 27660  
 tctatcaatt ttaccaatta gttagtgtaa tgtaacaaa aatgtgggag aatctaatta 27720  
 gtttttcttt acacaattga cgtacatgag tttgagttcc ttgtttttgc taattatttc 27780  
 atccaattta ttattcctga ctatatcgag atcttttgta taggagtcag acttgtattc 27840  
 aacatgcttt tctataatca ttttagctat ttcggcatca tccaatagta cattttccag 27900  
 attagcagaa tagatattaa tgtcgtattt gaacagagcc tgtaacatct caatgtcttt 27960  
 attatctata gccaatttaa tgtccggaat gaagagaagg gaattattgg tgtttgtcga 28020  
 cgtcatatag tcgagcaaga gaatcatcat atccacgtgt ccatttttta tagtgatgtg 28080  
 aatacaacta aggagaatag ccagatcaaa agtagatggt atctctgaaa gaaagtagga 28140  
 aacaatactt acatcattaa gcatgacggc atgataaaaat gaagttttcc atccagtttt 28200  
 cccatagaac atcagtctcc aatttttctt aacaacacgt tttaccgttt gcatgttacc 28260  
 actatcaacc gcataatata atgcagtgtt tcccttgtea tcaaattgtg aatcatccag 28320  
 tccactgaat agcaaaatct ttactatttt ggtatcttcc aatgtggctg cctgatgtaa 28380  
 tggaaatca ttctctagaa gatttttcaa tgctccagcg ttcaacaacg tacatactag 28440  
 acgcacgtta ttatcagcta ttgcataata caaggcacta tgaccgttga tatccgctt 28500  
 aatgcatct ttgctagaga gaaagctttt cagctgctta gacttccaag tattaattcg 28560  
 tgacagatcc atgtctgaaa cgagacgcta attagtgtat attttttcat tttttataat 28620  
 tttgtcatat tgcaccagaa ttaataatat ctctaataga tctgattagt agatacatgg 28680  
 ctatcgcaaa acaacatata cacatttaat aaaaataata tttattaaga aaattcagat 28740  
 ttcacgtacc catcaatata aataaaataa tgattcctta caccgtaacc atattaagga 28800  
 gattccacct taccataaaa caatataaat ccagtaatat catgtctgat gatgaacaca 28860  
 aatggtgtat taaattccag tttttcagga gatgatctcg ccgtagctac catgatagta 28920  
 gatgcctctg ctacagttcc ttgttcgtcg acatctatct ttgcattctg aaacatttta 28980  
 taaatatata atgggtccct agtcatatgt ttaaacgacg cattatctgg attaaacata 29040  
 ctaggagcca tcatttcggc tatcgactta atatccctct tattttcgat agaaaattta 29100  
 gggagttaa gattgtacac tttattccct aattgagacg accaatagtc taattttgca 29160  
 gccgtgatag aatctgtgaa atgggtcata ttatcaccta ttgocaggta cataactaata 29220  
 ttagcatcct tatacgaag gcgtaccatg tcatattctt cgtcatcgat tgtgattgta 29280  
 tttccttgca atttagtaac tacggtcctc atgggaaccg ttttcgtacc gtacttatta 29340  
 gtaaaactag cattgcgtgt tttagtata tcaaacggat attgccatat acctttaaaa 29400  
 tatatagtat taatgattgc ccatagagta ttattgtcga gcatattaga atctactaca 29460  
 ttagacatag cggatctacg ttctactata gaattaattt tattaaccgc atctcgtcta 29520  
 aagtttaatc tatataggcc gaatctatga tattgttgat aatacgcgg tttaatgcac 29580  
 acagtattat ctacgaaact ttgataagtt agatcagtgat acgtatattt agatgttttc 29640  
 agcttageta atcctgatat taattctgta aatgctggac ccagatctct ttttctcaaa 29700  
 tccatagtct tcaataatc tattctagta ttacctgatg caggcaatag cgacataaac 29760  
 atagaaaacg aatagccaaa cggcgagaag acaatattat catcttgaat atttttatac 29820

-continued

---

gctactatac cggcattggt aaatccttgc agacgatagg tagacgctga acacgctaac 29880  
gatagtatca ataacgcaat catgatttta tggatattaat aattaacctt atttttatgt 29940  
tcggtataaa aaaattattg atgtctacac atccttttgt aattgacatc tatatacct 30000  
tttgataat caactctaact cactttaact tttacagttt tcctaccag tttatcccta 30060  
tattcaacat atctatccat atgcatctta acactctctg ccaagatagc ttcagagtga 30120  
ggatagtc aaagataaat atataagagca taatcattct cgtatactct gccctttatt 30180  
acatcaccgg cattgggcaa cgaataacaa aatgcaagca tcttgtaac gggctcgtaa 30240  
attgggataa aaattatggt tttattgatt ttatatctat tttattcaag agaataattca 30300  
ggaatttctt tttccggttg tatctcgtcg cagtatatat catttgtaca ttgtttcata 30360  
tttttaata gtttacacct tttagtagga ctagtatcgt acaattcata gctgattttt 30420  
gaattccaat cacgcataaa aatctctcc aattgttgac gaagacctaa tccatcatcc 30480  
ggtgtaatat taatagatgc tccacatgta tccgtaaagt aatttcctgt ccaatttgag 30540  
gtacctatat aggcggtttt atcggttacc atataattgg catggtttac cctagaatac 30600  
ggaatgggag gatcagcatc tggtaacaata aatagcttta cttctatatt tatgttttta 30660  
gattttagca tagcgataga tcttaaaaag tttctcatga taaacgaaga tcggtgcccag 30720  
caactaatca atagcttaac ggatacttgt ctgtctatag cggatcttct taattcatct 30780  
tctatataag gccaaaacaa aattttacc gccttcgaat aaataatagg gataaagttc 30840  
ataacagata cataaacgaa tttactcgca tttctaatac atgacaataa agcgggttaa 30900  
tcattgggtc tttccatagt acatagttgt tgcgggcgag aagcaataaa tacagagtgt 30960  
ggaacgccgc ttacgttaat actaagagga tgatctgtat tataatacga cggataaaaag 31020  
tttttccaat tataatgtag attgttaact ccaagatacc agtatacctc aaaaatttga 31080  
gtgagatcgg ctgccaaagt cctattattg aagatcgcaa taccoaatc tttgacctga 31140  
gttagtgatc tccaatccat gttagcgtt cctaaataaa tatgtgtatt atcagatatic 31200  
caaaaatttg tatgaagaac tctcctagg atatttgtaa tatctatgta tcgtaactca 31260  
actcgggcca tttgtagtct ttaacatcc tttaatggtt tggttagattt attgacggct 31320  
actctaactc gtactcctct tttgggtaat tgtacaatct cgtttaatat tatcgtgccg 31380  
aaattcgtac ccacttcac cgataaactc caataaaaag atgatatac tagtgttttt 31440  
gtggtattgg atagaatttc cctccacatg ttaaatgtag acaaatatac tttatcaaat 31500  
tgcataccta taggaatagt ctctgtaatc actgcgattg tattatccgg attcatttta 31560  
ttgttataaa aataatccca taccacttca ctctatataa aatccaagtt tctatttctt 31620  
tcatgactga ttttttaact tcatccggtt ccttatgaag atgatgtttg gcaccttcat 31680  
aaatttttat ttctctatta caatttgcgt gttgcatgaa ataatatgca cctaaaacat 31740  
cgctaactct attgtttggt cctcggagta tgagagtcgg ggggggtgta atcttgga 31800  
ttatttttct aacctgttg gtgacctca agacctgact agcaaatcca gccttaattt 31860  
tttcatgatt gattaatggg tcgtattggt atttataaac tttatccata tctctagata 31920  
ctgattctgg acatagcttt ccgactggcg catttgggtg gatggttccc ataagtttgg 31980  
cagctagcag attcagcttt gaaacagcat ctgcattaac tagaggagac attagaatca 32040  
ttgctgtaaa caagtttggg ttatcgtgag aggctagtat agaaattggt gctccatgg 32100  
aatgacccaa taagtagatt taatagttac cacgtgctgt accaaagtca tcaatcatca 32160

-continued

---

```

tttttcacc attacttctt ccattgtccaa tatgatcatg tgagaatact aaaattccta 32220
acgatgatat gttttcagct agttcgtcat aacgtccaga atgtttacca gctccatgac 32280
ttatgaatac taatgcctta ggatattgaa taggtttcca atatattgaa tcattgtcca 32340
gattgaacat acagtttgca ctcatgattc acgttatata actatcaata ttaacagttc 32400
gtttgatgat catattatth ttatgtttta ttgataattg taaaacata caattaaatc 32460
aatatagagg aaggagacgg ctactgtctt ttgtgagata gtcattggca ctaaattaga 32520
ttatgaggat gctgtttttt actttgtgga tgatgataaa atatgtatgc gcgactccat 32580
catcgatcta atagatgaat atattacgtg gagaaatcat gttatagtgt ttaacaaaga 32640
tattaccagt tgtggaagac tgtacaagga attgatgaag ttcatgatg tcgctatacg 32700
gtactatggt attgataaaa ttaatgagat tgcgaagct atgagcgaag gagaccacta 32760
catcaattht acaaaagtcc atgatcagga aagtttattc gctaccatag gaatatgtgc 32820
taaaatcact gaacattggg gatataaaaa gatttcagaa tctagattcc aatcattggg 32880
aaacattaca gatctgatga ccgacgataa tataaacatc ttgatacttt ttctagaaaa 32940
aaaattgaat tgatgatata ggggtcttca taacgataa ttattacgtt agcattctat 33000
atccgtgtta aaaaaatta tctatcatg tatttgagag ttttatatgt agcaaacatg 33060
atagctgtga tgccaataag ctttagatat tcacgcgtgc tagtgtagg gatggtatta 33120
tctggtggtg aaatgtcctt tatataatct acaaaacaat catcgcatat agtatcgat 33180
agtagagtaa acatttttat agtttttact ggattcatac atcgtctacc caattcgggt 33240
ataaatgaaa ttgtcgcaa tcttacacc aacccttgt tatccattag tatagtatta 33300
acttcggtat ttatgtcata aactgtaaat gattttgtag atgccatctc atacatgata 33360
ttcatgtccc tattataatc attactaact ttatcacaat atatgttgat aatatctata 33420
tatgatctag tctttgtggg caactgtcta tacaagtcgt ctaaacgttg ttactcata 33480
tagtatcgaa cagccatcat tacatggtec cgttcctgtg atagataatc gagtatgtta 33540
gtggacttgt caaatctata taccatattt tctggaagtg gatatacata gtcgtgatca 33600
acattattgc tagcctcctc ttctatatcc tgtactatac cattatctat atcatctaca 33660
taatctaca tattattaca cataaacatc gacaacatac tattgtttat tatctaagtc 33720
ctgttgatcc aaacccttga tctcctctat ttgtactatc tagagattgt acttcttcca 33780
gttctggata atatatacgt tgatagatta gctgagctat tctatctcca gtatttacct 33840
taaacgtaca ttttccatta ttaataagaa tgactcctat gtttcccta taatcttctg 33900
ctattacacc gcctcctata tcaatgcctt ttagtgcag accagacctc ggagctattc 33960
taccatagca gaacttaggc atggacatac taatatctgt ctttaattaac tgtctttctc 34020
ctggagggat agtataatcg taagcgtctat acaaatcata tccggcagca cccggcgatt 34080
gcctagtagg agatttagct ctgttagttt ccttaacaaa tctaactggt gagttaatat 34140
tcatgttgaa cataaaacta atattttatt tcaaaattat ttaccatccc atatattcca 34200
tgaataagtg tgatgattgt acacttctat agtatctata tacgattcac gataaaatcc 34260
tcctatcaat agcagtttat tatccactat gatcaattct ggattatccc tcggataaat 34320
aggatcatct atcagagtc atgtattgct ggattcaca taaaattccg catttctacc 34380
aaccaagaat aaccttctac cgaacactaa cgcgcagat ttataatgag gataataagt 34440
ggatggcca aactgccact gatcatgatt gggtagcaaa tattctgtag ttgtatcagt 34500
ttcagaatgt cctccatta cgtataaac attgtttata gatgccactg ctggattaca 34560

```

-continued

---

tctaggtttc	agaagactcg	gcatattaac	ccaagcagca	tccccgtgga	accaacgctc	34620
aacagatgtg	ggatttggtg	gacctcctac	tacgtataat	ttattgttag	cgggtatccc	34680
gctagcatac	agtcctgggc	tattcatcgg	aggaattgga	atccaattgt	ttgatataata	34740
atttacagct	atagcattgt	tatgtatttc	attgttcac	catccaccga	tgagatatac	34800
tacttctcca	acatgagtac	ttgtacacat	atggaatata	tctataat	gatccatggt	34860
cataggatag	tctatgaatg	gatacttgta	tgatttgcgt	ggttggttat	cacaatgaaa	34920
tattttggta	cagtctagta	tccattttac	attatttata	cctctgggag	aaagataa	34980
tgacctgatt	acatttttga	taaggagtag	cagatttcct	aatttatttc	ttcgtttat	35040
ataccactta	atgacaaaat	caactacata	atcctcatct	ggaacattta	gttcatcgct	35100
ttctagaata	agttttatag	atagataatc	aaaattgtct	atgatgcat	cttccagttc	35160
caaaaagtgt	ttggcaataa	agtttttagt	atgacataag	agattggata	gtccgtattc	35220
tatacccatc	atgtaacact	cgacacaata	ttccttttcta	aaatctcgta	agataaagtt	35280
tatacaagtg	tagatgataa	attctacaga	ggtaataata	gaagcacgta	ataaattgac	35340
gacgttatga	ctatctatat	atacccttcc	agtatacgag	taaataacta	tagaagttaa	35400
actgtgaatg	tcaaggtcta	gacaaaacct	tgtaactgga	tctttatttt	tcgtgtattt	35460
ttgacgtaaa	tgtgtgcaaa	agtaaggaga	taactttttc	aatatcgtag	aattgactat	35520
tatattgcca	cctatagcat	caataattgt	tttgaatttc	ttagtcatag	acaatgctaa	35580
tatattctta	cagtacacag	tattgacaaa	tatcggcatt	tatgtttctt	taaaagtcaa	35640
catctagaga	aaaatgatta	tctttttgag	acataactcc	cattttttgg	tattcaccga	35700
cacgtttttc	gaaaaaatta	gtttttcctt	ccaatgatat	attttccatg	aatcaaacg	35760
gattggtaac	attataaatt	tttttaaac	ccaattcaga	aatcaatcta	tccgcaacga	35820
attctatata	tgttttcatc	atttcacaa	tcattcctat	aagtttaact	ggaagagccg	35880
cagtaagaaa	ttcttgttca	atggataccg	catctgttat	aatagatcta	acggtttctt	35940
cactcggtag	atgcaataaa	tgttttaaca	tcaaactatc	gaagtcgcag	tgtagaccct	36000
cgtctctact	aattagttcg	ttggaaaacg	tgagtcgggg	cattaggcca	cgttttttaa	36060
gcaaaaat	ggaagcgaat	gatccagaaa	agaaaattcc	ttctactgca	gcaaaggcaa	36120
taagtctctc	tccataaccg	gcgctgtcat	gtatccactt	ttgagcccaa	tcggccttct	36180
tttttacaca	aggcatcggt	tctatggcat	taaagagata	gtttttttca	ttactatctt	36240
taacataagt	atcgatcaaa	agactataca	tttccgaatg	aatgttttca	atggccatct	36300
gaaatccgta	gaaacatcta	gcctcggtaa	tctgtacttc	tgtacaaaat	cgttccgcca	36360
aattttcatt	cactattccg	tcactggctg	caaaaaacgc	caatacatgt	tttataaaat	36420
atttttcgtc	tggtgttagt	ttattccaat	cattgatatc	tttagatata	tctacttctt	36480
ccactgtcca	aaatgatgcc	tctgcctttt	tatacatggt	ccagatgtca	tgatattgga	36540
ttgggaaaa	aacaaatcta	tttgatttg	gtgcaaggat	gggttccata	actaaattaa	36600
caataacaat	aaattttttt	tcagttatct	atatgctgt	acttggatct	ttgtacatc	36660
gatatcgccg	caatcactac	aataattaca	agtattattg	atagcattgt	tattagtact	36720
atcataatta	aattatcgac	atcctatggg	gctgaataat	cggtattatc	atcattatca	36780
ttttgtaatt	gtgacatcat	actagataaa	tcgtttgca	gattgtgtg	ggaagcgggc	36840
atggaggatg	cattatcatt	attatttaac	gccttcatt	tgattcaca	aatgttacgc	36900

-continued

---

acattcaaca ttttatggaa actataattt tgtgaaaaca gataacaaga aaactcgtca 36960  
 tCGttcaaat ttttaacgat agtaaaccga ttaaaccgtcg agctaatttc taacgctagc 37020  
 gactctgttg gatatgggtt tccagatata tatcttttca gttcccctac gtatctataa 37080  
 tcatctgtag gaaatggaag atatttccat ttatctactg ttccctaatat catatgtggg 37140  
 ggtgtagtag aaccattaag cgcgaaagat gttatttcgc atcgtatfff aacttcgcaa 37200  
 taatttctgg ttagataacg cactctacca gtcaagtcaa tgatattagc ctttacagat 37260  
 atattcatag tagtcgtaac gatgactcca tcttttagat gcgatactcc tttgatgta 37320  
 ccagaatctt cgtacctcaa actcagatata tttaacaag ttaatgagat attaacgcgt 37380  
 tttatgaatg atgatataata accagaagtt ttatcctcgg tggctagcgc tataacctta 37440  
 tcattataat accaactagt gtgattaata tgtgacacgt tagtggggg acaaatatgt 37500  
 acattatcgt ctacgtcgta ttcgatacat ccgcatacag ccaacaaata taaaatgaca 37560  
 aatactctaa cgcggttcgt acccatcttg atgcgggtta ataatgttt tgatttcaat 37620  
 ttattgtaaa aaaagattcg gttttatact gttcagatatt ctcatgctt atattttcat 37680  
 ctatcatctc cacacagtca aatccgtggg tagcatgcac ctcatcaacc ggtaaaagac 37740  
 tatcggactc ttctatcatt ataactctag aatatttaat ttggtcatta ttaatcaagt 37800  
 caattatctt atttttaaca aacgtgagta ttttactcat tttttataaa aactttttaga 37860  
 aatatacaga ctctatcgtg tgtctatatac ttctttttat atccaatgta tttatgtctg 37920  
 atttttcttc atttatcata tataatggtc caaattctac acgtgcttcg gattcatcca 37980  
 gatcatlaag gttcttataa ttgtaacatc cttctcttcc ctctctaca tcttcttct 38040  
 tattcttatt cttagcgtca cagaatctac cacagcagga tcccatgacg agcgtcatat 38100  
 taaactaatc cattttcaat tataatataat gattagtaat gaccattaaa ataaaaata 38160  
 ttcttcataa ccgcaagaa agtgaaaagt tcacattgaa actatgtcag tagtatatat 38220  
 catgaaatga gatgaaatga gatgaaatga tgatataat attctctatt ttgggggagg 38280  
 attatgatgat ataattcgtg gataatcatt tttaagacac atttctttat tcgtaaatct 38340  
 tttcacgtta aatgagtgtc catattttgc aatttcttca tatgatggcg gtgtacgtgg 38400  
 acgaggctgc tctgttctt gttgtagtcg ccgactgtcg tgtctgcggt tagatccctc 38460  
 cattatcgcg attgcgtaga tggagtacta ttttatact tgtaattaaa tttttttatt 38520  
 aattaaactc ataaaaactc tccgtatctg tatttaagag ccagatttcg tctaatagaa 38580  
 caaatagcta cagtaaaaat aactagaata attgctacac ccactagaaa ccacggatcg 38640  
 taatacggca atcggttttc gataataggt ggaacgtata ttttatttaa ggacttaaca 38700  
 attgtctgta aaccacaatt tgcttcocgc gatcctgtat taactatctg taaaagcata 38760  
 tgttgaccgg gcggagccga acattctcgg atatctaat tctgtatata tataatatta 38820  
 ttaacctcgg catacgcatt acagttcttt tctagcttgg ataccgcact aggtacatcg 38880  
 tctagatcta ttctatttc ctacgcgata gctctctat ccttttccgg aagcaatgaa 38940  
 atcaactcaa taaatgattc aaccatgagt gtgaaactaa gtcgagaatt actcatgcat 39000  
 ttgtagtata ttcggagcgc gcaattttta aactgtccta taacctctcc tatatgaata 39060  
 gcacaagtga catttagtag gatagaatgt tgagctaatt tttgtaata actatctata 39120  
 aaaagattat acaaaagttt aaactcttca gtttccgcca tttatccagt ctgagaaaat 39180  
 gtctctcata ataaatttt ccaagaaact aattgggtga agaattgaaa cctttaatct 39240  
 atatttatca cagtctgtct tggtagacat gatgaattct tctaattcgt tactaaattc 39300

-continued

---

gatatctttt tcgattcttg gatatgtttt taataaagta tgaacaaaga aatggaaatc 39360  
gtaataccag ttatgttcaa ctttgaatt gttttttatt ttcttgtaa tgattccagc 39420  
cacttgggaa aagtcaaagt cgtttaatgc cgatttaata cgttcattaa aaacaaactt 39480  
tttacccttt agatgaatta ttattgggtc attggaatca aaaagtaaga tattatcggg 39540  
tttaagatct gcgtgtaaaa agttgtcgca acagggtagt tcgtagattt taatgtataa 39600  
cagagccatc tgtaaaaaga taaactttat gtattgtacc aaagatttaa atcctaattt 39660  
gatagctaac tcggtatcta ctttatctgc cgaatcacgt gctaggggaa aaattataat 39720  
gtttccctct tcatattcgt agttagttct cttttcatgt tcgaaaaagt gaaacatgcg 39780  
gttaaaatag tttaaacat taatattact gttaataact gccggataaa agtgggatag 39840  
taatttcacg aatttgatac tgcctttct ctcgttaaac gcctttaaaa aaactttaga 39900  
agaatatctc aatgagagtt cctgaccatc catagtttgt atcaataata gcaacatatg 39960  
aagaacccgt ttatacagag tatgtaaaaa tgtaattta tagtttaatc ccatggccca 40020  
cgcacacacg attaatTTTT tttcatctcc ctttagattg ttgtatagaa atttgggtac 40080  
tgtgaactcc gccgtagttt ccatgggact atataatttt gtggcctcga atacaaattt 40140  
tactacatag ttatctatct taaagactat accatattct cctgtagata tgtgataaaa 40200  
atcgtcgttt ataggataaa atcgtttatc cttttgttgg aaaaaggatg aattaatgta 40260  
atcattctct tctatcttta gtagtgttc cttattaaaa ttcttaaaat aatttaacaa 40320  
tctaactgac ggagcccaat tttggtgtaa atctaattgg gacattatat tgtaaaaata 40380  
caaacagctc cctaataata cagtatctga taatctatgg ggagacatcc attgatattc 40440  
aggggatgaa tcattggcaa cacccattta ttgtacaaaa agccccaatt taaaaacgaa 40500  
agtccagggt tgatagagac aaacaattaa ctattttgtc tctgttttta acacctccac 40560  
agtttttaat ttcttttagta atgaaattat tcacaatata agtatcttct ttatctacca 40620  
gagattttac taacttgata accttggctg tctcattcaa taggtagta atatttgat 40680  
gtgtgatatt gatattcttt tgaattgttt cttttagaag tgattctttg atggtgccag 40740  
catacgaatt acaataatgc agaaactcgg ttaacatgca ggaattatag taagccaatt 40800  
ccaattgttg cctgtgttgt attagagtgt caatatgagc aatgggtgccc ttgogtttct 40860  
ctgatagaat gcgagcagcg attttggcgt tatcatttga cgatatttct ggaatgacga 40920  
atcctgtttc tactaacttt ttggtaggac aaagtgaac aatcaagaag atagcttctc 40980  
ctcctatttg tggaagaaat tgaactctc tagatgatct actgacgata gtatctcctt 41040  
gacagatatt ggaccgaatt acagaagtac ctggaatgta aagccctgaa accccctcat 41100  
tttttaagca gattgttgc gtaaatctcg cactgtgacc aagatagaga gctcctttgg 41160  
tgaatccatc tctatgtttc agtttaacca agaaacagtc agctggtcta aaatttccat 41220  
ctctatctaa tacagcatct aacttgatgt caggaactat gaccggttta atgttatatg 41280  
taacattgag taaatcctta agttcataat catcactgtc atcagttatg tacgatccaa 41340  
acaatgtttc taccggcata gtggatacga agatgctatc catcagaatg tttccctgat 41400  
tagtattttc tatatagcta ttcttcttta aacgattttc caaatcagta actatgttca 41460  
tttttttagg agtaggagcg ctagccagta tggaagagga ttttctagat cctctcttca 41520  
acatctttga tctcgatgga atgcaaaacc ccatagttaa acaaccaacg ataaaaataa 41580  
tattgttttt cactttttat aattttacca tctgactcat ggattcatta atatctttat 41640

-continued

---

aagagctact aacgtataat tctttataac tgaactgaga tatatacacc ggatctatgg 41700  
ttcccataat tgagtaaatg aatgctcggc aataactaat ggcaaatgta taaaacaacg 41760  
aaattatact agagttgtta aagttaatat tttctatgag ctgttccaat aaattatttg 41820  
ttgtgactgc gttcaagtca taaatcatct tgatactatc cagtaaaccg tttttaagtt 41880  
ctggaatatt attatcccat tgtaaagccc ctaattcgac tatcgaatat cctgctctga 41940  
tagcagtttc aatatecagc gacgtcaata ctgtaataaa ggtgtagta ttgtcatcat 42000  
cgtgataaac tactggaata tggctgtag taggtacggt aactttacac aacgcgatat 42060  
ataactttcc ttttgtacca tttttaacgt agttgggacg tcctgcaggg tattgttttg 42120  
aagaaatgat atcgagaaca gatttgatac gatatttggt ggattcctga ttattcacta 42180  
taatataatc tagacagata gatgattcga taaatagaga aggtatatcg ttggtaggat 42240  
aatacatccc cattccagta ttctcggata ctctattgat gacactagtt aagaacatgt 42300  
cttctattct agaaaacgaa aacatcctac atggactcat taaaacttct aacgctcctg 42360  
attgtgtctc gaatgcctcg tacaaggatt tcaaggatgc catagattct ttgaccaacg 42420  
atttagaatt gcgttttagca tctgattttt ttattaaatc gaatggtcgg ctctctggtt 42480  
tgctacccca atgataacaa tagtcttgta aagataaacc gcaagaaaaa ttatacgcat 42540  
ccatccaaat aaccctagca ccatcggatg atattaatgt attattatag attttccatc 42600  
cacagttatt gggccagtat actgtagca acggtatatac gaatagatta ctcatgtaac 42660  
ctactagaat gatagttcgt gtactagtca taatatcttt aatccaatct aagaaattta 42720  
aaattagatt ttttacctg ttaaagttaa caaaagtatt acccgatatac gtggatatca 42780  
tatatggcat tggccatta tcagtaatag tcccataaac tgatacggcg atggttttta 42840  
tatgtgtttg atctaacgag gaagaaatc gcgcccacaa ttcactctca gatatgtatt 42900  
taatatacaa cggtaacaca tcaatttcgg gacgcgata tgtttctaaa tttttaatcc 42960  
aaatataatg atgacctata tgcctatta tcatactgtc aactatagta cacctagggg 43020  
acttacgata catctgtttc ctgtaatcgt taaattttac aaatctataa catgctaaac 43080  
cttttgacga caaccattca ttaatttctg atatggaatc tgtattctca ataccgatc 43140  
gttctaaagc cagtgtctata tctccctggt cgtgggaacg ctctctgata ataccgatca 43200  
acggataatc tgaagttttt ggagaataat atgactcatg atctatttctg tccataaaca 43260  
atctagacat aggaattgga ggcgatgatc ttaattttgt gcaatgagtc gtcaatccta 43320  
taacttctaa tcttgtaata ttcacatcag acataaact atctatgtta tcatcgtata 43380  
ttagtatacc atgaccttct tcatctctg ccaaaatgat atacagtctt aaataattac 43440  
gcaatatctc aatagtttca taattgtag ctgttttcat caaggtttgt atcctgttta 43500  
acatgatggc gttctataac gtctctatct tctattttta attttttaa tttttaacga 43560  
tttactgtgg ctagataacc aatctctctc aaatattttt ttagcctcgc ttacaagctg 43620  
tttatctata ctattaaaac tgacgaatcc gtgattttgg taatgggttc cgtcgaat 43680  
tgccgaagtg atatgaacat atcctcctgc gactatcaac aattttgtat tattctgaat 43740  
agtgaaaacc ttcacagata gatcattttg aacacacaac gcatctagac ttttgccggt 43800  
tgccatagaa tatacgtcgt tcttatccca attaccaact agaagtctga tcttaactcc 43860  
tctattaatg gctgcttcta taatggagtt gtaaatgtcg ggccaatagt agctattacc 43920  
gtcgacacgt gtatgggaa ctatggccaa atggtcaata tctatactag tcttagccga 43980  
cttgagttta tcaataacta catcggatc tagatctcta gaatatccca ataggtgttc 44040

-continued

---

cggagaatca gtaaagaaca ctccacctat aggattctta atatgatacg cagtgcctaac 44100  
tggcaaacaa caagccgcag agcataaatt caacctgaa ttttttgcgc tattaaaggc 44160  
tttaaaagta tcaaatcttc tacgaagatc tgtggccagc gggggataat cagaatatac 44220  
acctaacggt ttaategtat gtatagatcc tccagtaaat gacgcgttcc ctacataaca 44280  
tctttcatca tctgacaccc aaaaacaacc gagtagtagt cccacattat tttttttatc 44340  
tatattaacg gttataaaat ttatatccgg gcagtgactt tgtagctctc ccagatttct 44400  
tttcctcgt tcatctagca aaactattat tttaatccct ttttcagatg cctcttttag 44460  
tttatcaaaa ataagcgtc ccttagtctg actcagagga ttacaacaaa aagatgctat 44520  
gtatatatat ttcttagcta gagtgataat ttcgttaaaa cattcaaatg ttgtcaaatg 44580  
atcgatctc aaatccatat tttctggtag tgtttctacc agcctacatt ttgctcccgc 44640  
aggtaccggt gcaaatggcc acatttagtt aacataaaaa cttatacatc ctgttctatc 44700  
aacgattcta gaatatcatc ggctatatcg ctaaaatctt catcaaagtc gacatcacia 44760  
cctaactcag tcaatatatt aagaagttcc atgatgtcat ctctgtctat ttctatatcc 44820  
gtatccattg tagattgttg accgattatc gagtttaaat cttactaat actcaatcct 44880  
tcagaataca atctgtgttt cattgtaaat ttataggcgg tgtatttaag ttggtagatt 44940  
ttcaattatg tattaatata gcaacagtag tttttgctcc tcttgatc tagcctctc 45000  
ttcattattt tcttctacgt acataaacat gtccaatcag ttagacaaca caccgacgat 45060  
ggcggcccgc acagacacga atatgactaa accgatgacc atttaaaaac ccctctctag 45120  
ctttcactta aactgtatcg atcattcttt tagcacatgt ataataaaa aaaacattat 45180  
tctatttoga atttaggctt ccaaaaattt ttcacccgta aaccgataat aatataatata 45240  
gacttgtaa tagtcggaat aaatagatta atgcttaaac tatcatcatc tccacgatta 45300  
gagatacaat atttacatc tttttgctgt ttcgaaaact tatcaataca cgtaataca 45360  
aaccagga gtagatattg aaactgaggc tgttgaaaat gaaacgggta atacaataat 45420  
tcagataatg taaaatcatg atctcgtatt ctgatgatat tagaactgct aatggatgct 45480  
gatggtatg atctaggagt atctatttta acaaagcatc gatttgctaa tatacaatta 45540  
tcttttgat taattgttat tttatccta ttcttaaaag gtttcatatt tatcaattct 45600  
tctacattaa aaatttccat ttttaattta tgtagcccgc caatactcct cattacgttt 45660  
cattttttgt ctataatate cattttgttc atctcggtag atagattatc caattgagaa 45720  
gcgcathtag tagttttgta cattttaagt ttattgacga atcgtcgaaa actagttata 45780  
gttaacattt tattatttga taccctgata ttaatacccc tgccgttact attatttata 45840  
actgatgtaa tccacgtaac attagaatta attatcgata gtaatgcac gacgcttcca 45900  
aaattgtcta ttataaactc accgataatt tttttattgc atgttttcat attcattagg 45960  
attatcaaat cttaatcctt attacgattg tatcggtga tattgcaaga cgctattcta 46020  
aaagacggag gatctccatc aaatgccaaa caatcacgta caaagtacat ggaaataggt 46080  
tttgttctat tgcgcatcat agatttatat agaacaccgc tagaaatact aatttgtttt 46140  
actctataaa atactaatgc atctatttca tctgtttgta taacgtcttt ccaagtgtca 46200  
aattccaaat ttttttcatt gatagtacca aattcttcta tctctttaa tacttgcata 46260  
gataggtaat tacagtgatg cctacatgcc gttttttgaa actgaataga tgcgtctaga 46320  
agcgatgcta cgctagtcac aatcaccact ttcattatta gaatatatgt atgtaaaaat 46380

-continued

---

atagtagaat ttcattttgt ttttttctat gctataaatg aattctcatt ttgcactcgc 46440  
tcatactcog ttttatatca ataccaaaaga aggaagatat ctgggtctaa aagccggttaa 46500  
agtatgcatg gttagaactg tagaatgcca aggaagtaaa gcttctcgcg tactcaaagt 46560  
agataaaccc tcatcgcccg cgtgtgagag aagacctcg tcccctcca gatgagagag 46620  
aatgaataac cctggaaaac aagtccggtt tatgaggacg gacatgctac aaaatatggt 46680  
cgcggtcaat cgcgataatg tagctctag acttttctcc taaaatacta ttatctctt 46740  
ttcgatatta ataaatcogt gtcgtccagg ttttttatct ctttcagtat gtgaatagat 46800  
aggatattta tctctattca tcatcgaatt taagagatcc gataaacatt gtttgtattc 46860  
tccagatgtc agcatctgat acaacaatat atgtgcacat aaacctctgg cacttatttc 46920  
atgtaccttc cccttatcac taaggagaat agtatttgag aaatatgtat acatgatatt 46980  
atcatgaatt agatatacag aatttgaac actctcgaaa tcacacgatg tgcggcggtt 47040  
aagatctaata atactctcg ataacacatt ttcactctaga taccactagac attttttaaa 47100  
gctaaaatag tcttttagtag taacagtaac tatgcgatta ttttctcga tgatacattt 47160  
catcggcata ttattacgct taccatcaaa gactatacca tgggtatatac taacgtattc 47220  
tagcatagtt gccatacgcg cattaaactt ttcaggatct ttggatagat cttccaatct 47280  
atctatttga gaaaacattt ttatcatggt caatagttga aacgtcggat ccactatata 47340  
gatattatct ataaagattt taggaactac gttcatggta tccctggcgaa tattaaaact 47400  
atcaatgata tgattatcgt tttcatcttt tatcaccata tagtttctaa gatatgggat 47460  
tttacttaata ataattat tcccctgat aaattttatt agaaaggcca aatctataag 47520  
aaaagtccta gaattagtct gaagaatata tatatcgccg tatagtatat ttggattaat 47580  
tagatataga gaatatgatc cgtaacatat acaactttta ttatggcgtc taagatattc 47640  
ttccatcaac ttattaacat ttttgactag ggaagataca ttatgacgtc ccattacttt 47700  
tgccttctct attactcga cgttcataga atttagcata tctcttgcca attcttccat 47760  
tgatgttaca ttataagaaa ttttagatga aattacattt ggagctttaa tagtaagaac 47820  
tcctaataatg tccgtgtatg tggctactaa tacagattgt agttctataa tcgtaaaaa 47880  
tttacctata ttatattggtt gactctggtt agaaaagtag ctaagtatac gatcttttat 47940  
ttctgatgca gatgatcaa catcggaaaa aaactttttt ttattctttt ttactaaaga 48000  
tacaatatg tctttgttaa aaacagttat tttctgaata tttctagctt gtaattttaa 48060  
catatgatat tcttccacac taggtactct gcctaaatag gttctataa tctttaaagt 48120  
aatattagga aaagtattct gatcaggatt cctattcatt ttgaggattt aaaactctga 48180  
ttattgtcta atattggtct tacgcaaac ttttcacaga gcgatagagt ttttgataac 48240  
tcgtttttct taagaaatat aaaactactg tctccagagc tcgctctatc ttttatttta 48300  
tctaattcga tacaactccc tgatactggt tcagaaagta attcattaat tttcagctct 48360  
ttatagaaga tatttaatat agataataca aaactctcag tttttgatat cgatctgatt 48420  
gatcctagaa ctgatatat taataacgtg ctcataggc agtttatggc agcttgataa 48480  
ttagatatag tatattccag ttcataattta ttagataccg cattgcccag attttgatat 48540  
tctatgaatt cctctgaaaa taaatccaaa ataactagac attctatttt ttgtggatta 48600  
gtgtactctc tcccctctat catgttccact actggtgtcc acgatgataa atatctagag 48660  
ggaatataat atagtccata ggatgccaat cttagcaatgt cgaataactg taatttgatt 48720  
cttcgttctt cattatgaat tgattcttga ggtataaac taacacaaat tatattatta 48780

-continued

---

gacttttcgt atgtaatgtc tttcatgtta taagttttta atcctggaat agaactctatt 48840  
ttaatgagge ttttaaacgc agagttctcc aacgagtcaa agcataatac tctgttggtt 48900  
ttcttatata cgatgttacg attttcttct ttgaatggaa taggtttttg aattagttta 48960  
taattacaac ataatagata aggaagtgtg caaatagtac gcggaaaaaa cataatagct 49020  
cccctgtttt catccatggt ttttaagtaa tgatcactgg cttctttagt caatggatat 49080  
tcgaacatta accgtttcat catcattgga cagaatccat atttcttaat gtaaagagt 49140  
atcaaatcat tgtgtttatt gtaccatctt gttgtaaatg tgtattcggg tatcggatct 49200  
gctccttttt ctattaaagt atcgatgtcg atctcgtcta agaattcaac tatatcgaca 49260  
tatttcattt gtatacacat aaccattact aacgtagaat gtataggaag agatgtaacg 49320  
ggaacagggg ttgttgatc gcaaacattt ctaatacata attcttctgt taatacgtct 49380  
tgcacgtaat ctattataga tgccaagata tctatataat tattttgtaa gatgatgta 49440  
actatgtgat ctataaagt agtgtaataa ttcattgtatt ttgatatatg ttccaactct 49500  
gtctttgtga tgtctagttt cgtaatatct atagcatcct caaaaaatat attcgcata 49560  
attccaagt cttcagttct atcttctaaa aaatcttcaa cgtatggaat ataataatct 49620  
attttacctc ttctgatatc attaatgata taatttttga cactatcttc tgtcaattga 49680  
ttcttattca ctatatctaa gaaacggata gcgtccctag gacgaaactc tgccattaat 49740  
atctctatta tagcttctgg acataattca tctattatac cagaattaat gggaaactatt 49800  
ccgatctat ctaacatagt ttttaagaaag tcagaatcta agacctgatg ttcatatatt 49860  
ggttcataca tgaatgatc tctattgatg atagtgacta tttcattctc tgaaaattgg 49920  
taactcattc tatatatgct ttccttggtg atgaaggata gaatatactc aatagaattt 49980  
gtaccaacaa actgttctct tatgaatcgt atatcatcat ctgaaataat catgtaaggc 50040  
atacatttaa caattagaga cttgtctcct gttatcaata tactattctt gtgataattt 50100  
atgtgtgagg caaatttgtc cacgttcttt aattttgtta tagtagatat caaatccaat 50160  
ggagctacag ttcttggtt aaacagatat agtttttctg gaacaaattc tacaacatta 50220  
ttataaagga ctttgggtag ataagtggga tgaaatccta ttttaattaa tgcgatagcc 50280  
ttgtcctcgt gcagatatcc aaacgctttt gtgatagtat ggcattcatt gtctagaaac 50340  
gctctacgaa tatctgtgac agatatcctc tttagagaat atactagtcg cgttaatagt 50400  
actacaattt gtatttttta atctatctca ataaaaaat taatagtgtat gattcaatgt 50460  
ataactaaac tactaactgt tattgataac tagaatcaga atctaagat gacgtaacca 50520  
agaagtttat ctactgcaa tttagctgca ttatttttag catctcgttt agattttcca 50580  
tcggccttat cgaatactct tccgtcgata tctacacagg cataaaatgt aggagagtta 50640  
ctaggcccaa ctgattcaat acgaaaagac caatctctcc tagtaatttg gcagtaactc 50700  
ttaataacgg tgacaggggt agcatcttcc caatcaataa ttttttttag cggaataaca 50760  
tcatcaaaag acttatgatc ctctctcatt gatttttctg gggatacacc atctattatg 50820  
gcgtcagcca taacatcagc atccggctta tccgcctccg ttgtcataaa ccaacgagga 50880  
ggaatatcgt cggagctgta caccatagca ctacgttgaa gatcgtacag agctttatta 50940  
acttctcgt tctccatatt aagttgtcta gttagttgtg cagcagtagc tccttcgatt 51000  
ccaatggttt taatagctc acacacaatc tctgcgttag aacgttcgct gatatagatt 51060  
ttagacattt tttagagaaa ctaacgcaat cagtaataaa actaatttat tttatcattt 51120

-continued

---

ttttattcat catcctctgg tggttcgtcg ttcctatcga atgtggatct gattaaccgg 51180  
 tcatctatag gtgatgctgg tctcggagat tctggaggag atggattatt atctggaaga 51240  
 atctctgtta tttcctgtt ttcattgata gattgctgtg taacattaag attgcgaaat 51300  
 gctctaaatt tgggaggctt aaagtgttgt ttgcaatctc tacacgcgtg tctaactagt 51360  
 ggaggttcgt cagctgctct agtttgaatc atcatcggtg tagtattcct acttttacag 51420  
 ttaggacacg gtgtattgta tttcctcgtc agaacgttaa aataatcgtt gtaactcaca 51480  
 tcctttatth tatctatatt gtattctact cctttcttaa tgcattttat accgaataag 51540  
 agatagcgaa ggaattcttt ttcggtgccg ctagtaccct taatcatatc acatagtgtt 51600  
 ttatattcca aatttgtggc aatagacggt ttatttctat acgatagttt gtttctggaa 51660  
 tcctttgagt attctatacc aatattattc ttgattcga atttagtttc ttcgatatta 51720  
 gattttgtat tacctatatt ctgtgatgag tactttgatg atttttccat ggccattctt 51780  
 attaagtctt ccaagttggc atcatccaca tattgtgata gtaattctcg gatatcagta 51840  
 gcggttacgc ccattgatgt ttgttcattg gatgagtaac tactaatgta tacattttcc 51900  
 atttataaca cttatgtatt aactttgttc atttatatt tttcattatt atgttgatat 51960  
 taacaaaagt gaatatatat gtttaataat gtattgtggg tatacggcta caattttata 52020  
 atgagtgaaa gtcagtgctc gatgatcaat gacgatagct ttactctgaa aagaaagtat 52080  
 caaatcgata gtgcggagtc aacaataaaa atggataaga agaggacaaa gtttcagaat 52140  
 agagccaaaa tggtaaaaga aataaatcag acaataagag cagcacaaac tcattacgag 52200  
 acattgaaac taggatacat aaaatttaag agaatgatta ggactactac tctagaagat 52260  
 atagcaccat ctattccaaa taatcagaaa acttataaac tattctcgga catttcagcc 52320  
 atcggcaaaag catcacagaa tccgagtaag atggtatatg ctctgctgct ttacatgttt 52380  
 cccaatttgt ttggagatga ccatagattc attcgttata gaatgcatcc aatgagtaaa 52440  
 atcaaacaca agatcttctc tcctttcaaa cttaactcta ttagaatatt agtggaaaga 52500  
 agattctata ataataatg cagatctaataaatggaaaa taattggaac acaagttgat 52560  
 aaaatgttga tagctgaatc tgataaatat acaatagatg caaggataaa cctaaaacc 52620  
 atgtatagaa tcaagggaga atctgaagaa gataccctct tcatcaaaaca gatggtagaa 52680  
 caatgtgtga catcccagga atgggtggaa aaagtgttga agatactgtt tagagatttg 52740  
 ttcaagagtg gagaatacaa agcgtacaga tacgatgatg atgtagaaaa tggattcatt 52800  
 ggattggata cactaaaatt aaacattgtt catgatatag ttgaaccatg tatgcctgtt 52860  
 cgtaggccag tggctaagat actgtgtaaa gaaatggtaa ataaatactt tgagaatccg 52920  
 ctacatatta ttggtaaaaa tcttcaagag tgcattgact ttgttagtga ataggcattt 52980  
 catctttctc caataactaat tcaaatgtt aaattaataa tggatagtat aaatagttat 53040  
 tagtgataaa atagtaaaaa taattattag aataagagtg tagtatcata gataactctc 53100  
 ttctataaaa atggatttta ttcgtagaaa gtatcttata tacacagtag aaaataatat 53160  
 agatttttta aaggatgata cattaagtaa agtaacaat tttaccctca atcatgtact 53220  
 agctctcaag tatctagtta gcaattttcc tcaacatgtt attactaagg atgtattagc 53280  
 taataccaat ttttttgtt tcatacatat ggtacgatgt tgtaaaagtgt acgaagcgg 53340  
 tttacgacac gcattttgat caccacgtt gtacgttaa gcattgacta agaattattt 53400  
 atcgtttagt aacgcaatac aatcgtacaa ggaaaccgtg cataaactaa cacaagatga 53460  
 aaaattttta gaggttgccg aatcatgga cgaattagga gaacttatag gcgtaaaata 53520

-continued

---

```

tgacttagtt cttaatccat tatttcacgg aggggaaccc atcaaagata tggaaatcat 53580
ttttttaaaa ctgtttaaga aaacagactt caaagttggt aaaaaattaa gtgttataag 53640
attacttatt tgggcatacc taagcaagaa agatacagcg atagagtttg cggataatga 53700
tagacaagat atatacactt tatttcaaca aactggtaga atcgtccata gcaatctaac 53760
agaaacgttt agagattata tctttcccg agataagact agctattggg tgtggttaaa 53820
cgaaagtata gctaatgatg cggatattgt tcttaataga cacgccatta ccatgtatga 53880
taaaattcctt agttatatat actctgagat aaaacaagga cgcgttaata aaaacatgct 53940
taagttagtt tatactcttg agcctgaaaa agatatcaga gaacttctgc tagaaatcat 54000
atatgatatt cctggagata tcctatctat tattgatgca aaaaacgacg attggaaaaa 54060
atattttatt agtttttata aagctaattt tattaacggt aatacattta ttagtgatag 54120
aacgtttaac gaggacttat tcagagttgt tgttcaaata gatcccgaat atttcgataa 54180
tgaacgaatt atgtctttat tctctacgag tgctcggac attaaacgat ttgatgagtt 54240
agatattaat aacagttata tatctaata aatttatgag gtgaacgata tcacattaga 54300
tacaatggat gatatgaaga agtgtcaaat ctttaacgag gatacgtcgt attatgttaa 54360
ggaatacaat acatacctgt ttttgacga gtcggatccc atggtcatag agaacggaat 54420
actaaagaaa ctgtcatcta taaaatocaa gagtagacgg ctgaacttgt ttagcaaaaa 54480
cattttaaaa tattatttag acggacaatt ggctcgtcta ggtcttgtgt tagatgatta 54540
taaaggagac ttgttagtta aaatgataaa ccatcttaag tctgtggagg atgtatccgc 54600
attcgttcga ttttctacag ataaaaaccc tagtattcct ccatcgttaa tcaaaactat 54660
tttagctagt tataatattt ccatcatcgt cttatttcaa aggtttttga gagataatct 54720
atatcatgta gaagaattct tggataaaaag catccatcta accaagacgg ataagaaata 54780
tatacttcaa ttgataagac acggttagatc atagaacaga ccaaatatat tattaataat 54840
ttgtatatac atagatataa ttatcacaca tttttgataa atgggaactg ctgcaacaat 54900
tcagactccc accaaattaa tgaataaaga aaatgcagaa atgattttgg aaaaaattgt 54960
tgatcatata gttatgtata ttagtgacga atcaagtgat tcagaaaata atcctgaata 55020
tattgatttt cgtaacagat acgaagacta tagatctctc attataaaaa gtgatcacga 55080
gtttgtaaag ctatgtaaaa atcatgcaga gaaaagttct ccagaaacgc aacaaatgat 55140
tatcaaacac atatacgaac aatatcttat tccagtatct gaagtactat taaaacctat 55200
aatgtccatg ggtgacataa ttacatataa cggatgtaaa gacaatgaat ggatgctaga 55260
acaactctct accctaaact ttaacaatct cgcacatgg aactcatgta gcataggcaa 55320
tgtaacgcgt ctgttttata catttttttag ttatctgatg aaagataaac taaatatata 55380
agtataatcc cattctaata ctttaacctg atgtattagc atcttattag aatattaacc 55440
taactaaaag acataacata aaaactcatt acatagttga taaaagcgg taggatataa 55500
atattatggc tgccaccgtt ccgcgttttg acgacgtgta caaaaatgca caaagaagaa 55560
ttctagatca agaaacattt tttagtagag gtctaagtag accgttaatg aaaaacacat 55620
atctatttga taattacgcg tatggatgga taccagaaac tgcaatttgg agtagtagat 55680
acgcaaacct agatgctagt gactattatc ccatttcggt gggattactt aaaaagtctg 55740
agtttctcat gtctctatat aaaggtoccta ttccagtata cgaagaaaaa gtaaatctg 55800
aattcattgc taatggatcg ttctctggta gatacgtatc atatcttaga aagttttctg 55860

```

-continued

---

ctcttccaac aaacgagttt attagttttt tgttactgac ttccattcca atctataata 55920  
tcttgttctg gtttaaaaat acacagtttg atattactaa acacacatta ttcagatacg 55980  
tctatacaga taatgceaaa cacctggcgt tggctaggta tatgcatcaa acaggagact 56040  
ataagccttt gtttagtctg ctcaaagaga attatatatt taccgggtccc gttccaataa 56100  
gtatcaaaga tatagatcac cctaacttta gtagagcaag aagtcocatcc gattatgaga 56160  
cattagctaa tattagtact atattgtact ttaccaagta tgatccggta ttaatgtttt 56220  
tattgtttta cgtacctggg tattcaatta ctacaaaaat tactccagcc gtagaatatc 56280  
taatggataa actgaatcta acaagagcgc acgtacaact gttgtaaatt attttatgct 56340  
tcgtaaaatg taggttttga accaaaacatt ctttcaaga atgagatgca taaaacttta 56400  
ttatccaata gattgactat ttcggaogtc aatcgtttaa agtaaaacttc gtaaaatatt 56460  
ctttgatcac tgccgagttt aaaacttcta tcgataattg tttcatatgt tttaatattt 56520  
acaagttttt tggccatgg tacattagcc ggacaaaat atgcaaaata atatcgttct 56580  
ccaagtctta tagtttctgg attattttta ttatattcag taaccaaata catattaggg 56640  
ttatctgcgg atttataatt tgagtgatgc attcgactca acataaataa ttctagagga 56700  
gacgatctac tatcaaatc ggatcgtaaa tctgtttcta aagaacggag aatatctata 56760  
catacctgat tagaatctat ccgtccttca gacaacatct cagacagtct ggtcttgat 56820  
gtcttaatca tattcttatg aaacttgaa acatctcttc tagtttctact agtaccttta 56880  
ttaattctct caggtagaga ttttgaatc gacgatgctg agtattctat cgttgatata 56940  
ttcttctctg attgcataat cagattotta tataccgctt caaactctat tttaaaatta 57000  
ttaaacaata ctctactatt aatcagtcgt tctaactcct ttgctatttc tatggactta 57060  
tctacatctt gactgtctat ctctgtaaac acggagtcgg tatctccata cacgctacga 57120  
aaacgaaatc tgtaatctat aggcaacgat gttttcacia tcggattaat atctctatcg 57180  
tccatataaa atggattact taatggattg gcaaaccgta acataaccgtt agataactct 57240  
gtccatttta gtaccgatc tagatacaag atcattctac gtccatgga tgtgcaactc 57300  
ttagccgaag cgtatgagta tagagcacta tttctaaatc ccatcagacc atatactgag 57360  
ttggctacta tcttgtaact atattgcatg gaatcataaa tggccttttc agttgaactg 57420  
gtagcctgtt ttagcatctt tttatatctg gctctctctg ccaaaaatgt tcttaatagt 57480  
ctaggaatgg ttccttctat cgatctatcg aaaattgcta tttcagagat gaggttcggt 57540  
agtctagggt cacaaatgac cgtaatatat ctaggaggtg gatatttctg aagcaagagc 57600  
tgattattta tttcttcttc caatctattg gtactaacia cgacaccgac taatgtttcc 57660  
ggagatagat ttccaaagat acacacatta ggatacagac tgttataatc aaagattaat 57720  
acattattac taaacatttt ttgttttggg gcaaaacct tactcccttc ataaggaaac 57780  
ttttgttttg tttctgatct aactaagata gttttagttt ccaacaatag ctttaacagt 57840  
ggacccttga tgactgtact cgctctatat tcgaatacca tggattgagg aagcacatat 57900  
gttgacgcac ccgctgtctg ttttgtttct actccataat actcccacia atactgacac 57960  
aaacaagcat catgaatata gtatctagcc atactctaaag ctatgttttag attataatcc 58020  
ttatacatct gagctaaatc aacgtcatcc tttccgaaag ataatttata tgtatcatta 58080  
ggtaaagtag gacataatag tacgacttta aatccatttt ccaaaatate tttacgaatt 58140  
actttacata taatatcttc atcaacagtc acataattac ctgtgggttaa aacctttgca 58200  
aatgcagcgg ctttgctttt ccgctccgta gtatcgtcac cgatgaacgt cttttctcta 58260

-continued

---

actcctctat ttaatacttt acccatgcaa ctgaacgcgt tcttggatat agaatccaat 58320  
ttgtacgaat ccaatttttc aaatttttga atgaatgaat atagatcgaa aaatatagtt 58380  
ccattattgt tattaacgtg aaacgtagta ttggccatgc cgcctactcc cttatgacta 58440  
gactgatttc tctcataaat acagagatgt acagcttccct ttttgcctgg agatctaaag 58500  
ataatcttct ctctgttaa taactctaga cgattagtaa tatactcag atcaaagtta 58560  
tgtccgttaa aggtaacgac gtagtogaac gttagttcca acaattgttt agctattcgt 58620  
aacaaaacta tttcagaaca tagaactagt tctcgttcgt aatccatttc cattagtgc 58680  
tgtatcctca aacatcctct atcgacggct tcttgtattt cctgttccgt taacatctct 58740  
tcattaatga gcgtaaaaa taatcgttta ccaactaaat cgatataaca gtaacttgta 58800  
tgcgagattg ggtaataaaa tacagaagga aacttcttat cgaagtgaca ctctatatct 58860  
agaaataagt acgatcttgg gatatcgaat ctaggatttt ttttagcgaa acagttacgt 58920  
ggatcgtcac aatgataaca tccattgtta atctttgtca aatattgctc gtccaacgag 58980  
taacatccgt ctggagatat cccgttagaa atataaaacc aactaatatt gagaaattca 59040  
tccatggtgg cattttgtat gctgcgtttc tttggctctt ctatcaacca catatctgctg 59100  
acggagcatt ttctatcttt aatatctaga ttataactta ttgtctcgtc aatgtctata 59160  
gttctcatct tcccacacgg cctcgcatta aatggaggag gagacaatga ctgatatatt 59220  
tcgtccgtca ctacgtaata aaagtaatga ggaaatcgta taaatcgggt ctcaccattt 59280  
cgacatctgg atttcagata taaaaactcg ttttcaccgt gactttcaaa ccaattaatg 59340  
caccgaacat ccatttatag aatttagaaa tatattttca tttaaatgaa tcccacacat 59400  
tggggaagag ccgtatggac cattattttt atagtacttt cgcaagcggg ttagacggc 59460  
aacatagaag cgtgtaaacg aaaactatat actatagtta gcactcttcc atgtcctgca 59520  
tgtagacggc acgcgactat tgetatagag gacaataatg tcatgtctag cgatgatctg 59580  
aattatattt attatttttt catcagatta tttaacaatt tggcatctga tcccacacac 59640  
gcgatcgatg tgacaaaagg taacccttta taaactaac ccattataaa acttatgatt 59700  
agtcacgact gaaataacgg cgtgattatt ttttggata attctacacg gcatggtttc 59760  
tgtgactatg aattcaacc cgttacatt agtgaaatct ttaacaaaca gcaagggttc 59820  
gtcaaagaca taaaactcat tgtttacaat cgaaatagac cccctatcac acttaaaata 59880  
aaaaatatcc ttatccttta ccaccaata aaattctgat tggtaaatgt gaatgtatc 59940  
acttaacagt tccacaaatt tatttattaa ctccgaggca catacatcgt cggatttttt 60000  
tatggcaaac tttactcttc cagcatccgt ttctaaaaaa atattaacga gttccattta 60060  
tatcatccaa tattattgaa atgacgttga tggacagatg atacaaataa gaaggtagcg 60120  
tacctttgtc caccatctcc tccaattcat gctctatttt gtcattaact ttaatgatg 60180  
aaaacagtac gccacatgct tccatgacag tgtgtaacac tttggatata aaatgtttga 60240  
cattagtata attgtccaag actgtcaatc tataatagat agtagctata atatattcta 60300  
tgatggtatt gaagaagatg acaaccttgg catattgatc atttaacaca gacatggtat 60360  
caacagatag cttgaatgaa agagaatcag taattggaat aagcgtcttc tcgatagagt 60420  
gtccgtatac caacatgtct gatattttga tgtattccat taaattattt agttttttct 60480  
ttttattttc gttaaacagc atttctgtca acggacccca acatcgttga ccgattaagt 60540  
tttgattgat ttttcgtgt aatgcgtatc tagtcagatc gtatagccta tccaataatc 60600

-continued

---

catcatctgt	gcgtagatca	catcgtacac	tttttaattc	tctatagaag	agcgacagac	60660
atctggagca	attacagaca	gcaatttctt	tattctctac	agatgtaaga	tacttgaaga	60720
cattcctatg	atgatgcaga	attttggata	acacggattt	gatggtatct	gttaccataa	60780
ttcctttgat	ggctgatagt	gtcagagcac	aagatttcca	atctttgaca	attttttagca	60840
ccattatctt	tgttttgata	tctatatcag	acagcatggt	gcgtctgaca	acacagggat	60900
taagacggaa	agatgaaatg	attctctcaa	catcttcaat	agataccttg	ctattttttc	60960
tggcattatc	tatatgtgcg	agaatatcct	ctagagaatc	agtatccttt	ttgatgatag	61020
tggatctcaa	tgacatggga	cgtctaaacc	ttcttattct	atcaccagat	tgcatggtga	61080
tttgtctctt	ttcttttate	ataatgtaat	ctctaaattc	atcggcaaat	tgtctatate	61140
taaaatcata	atatgagatg	tttacctcta	caaatatctg	ttcgtccaat	gttagagtat	61200
ttacatcagt	tttgtattcc	aaattaaaca	tggcaacgga	tttaatttta	tattcctcta	61260
ttaagtctct	gtcgataata	acagaatgta	gataaatcatt	taatccatcg	tacatggttg	61320
gaagatgctt	gttgacaaaa	tctttaattg	tcttgatgaa	ggtgggacta	tatctaacat	61380
cttgattaat	aaaatttata	acattgtcca	taggatactt	tgtaactagt	tttatacaca	61440
tctcttcate	ggtaagttta	gacagaatat	cgtgaacagg	tggtatatta	tattcatcag	61500
atatacgaag	aacaatgtcc	aaatctatat	tgtttaatat	attatataga	tgtagcgtag	61560
ctcctacagg	aatatcttta	actaagtcaa	tgatttcate	aaccgtaga	tctattttaa	61620
agttaatcat	ataggcattg	atttttaaaa	ggtatgtagc	cttgactaca	ttctcattaa	61680
ttaaccattc	caagtcactg	tgtgtaagaa	gatttatatt	tatcataagc	ttgactacat	61740
ttggtcccca	taccattaaa	gaattcttat	gatataagga	aacagatttt	aggtactcat	61800
ctactctaca	agaattttgg	agagccttaa	cgatatcagt	gacgtttatt	atctcaggag	61860
gaaaaaacct	aacattgaga	atatacggat	taatagcttc	cagatacagt	gattttggca	61920
atagtcctgt	taatccataa	tccagtaaca	cgagctgggt	cttgctagac	accttttcaa	61980
tgtttaattt	ttttgaaata	agctttgata	aagccttctc	cgcaaatcc	ggatacatga	62040
acatgtcggc	gacatgatta	agtattgttt	tttcattatt	tttatatttt	ctcaacaagt	62100
tctcaatacc	ccaatagatg	atagaatatc	acccaatgcg	tccatgttgt	ctatttccaa	62160
caggctccta	tatccacca	tagaagtttt	ccccaaaaag	attctaggaa	cagttctacc	62220
accagtaatt	tgttcaaaat	aatcccga	ttcattttcg	ggtttaaatt	ctttaatatc	62280
gacaatttca	tacgctctct	ttttgaaact	aaacttattt	agaatatcca	gtgcattttc	62340
acaaaaagga	catgtatact	tgacaaaaat	tgctactttg	ttattggcca	acctttgttg	62400
tacaaattcc	tccggcattt	taatattta	gtgatataaa	actatctcga	cttatttaac	62460
tcttttagtcg	agatatatgg	acgcagatag	ctatatgata	gcccaactaca	gaaggcaaac	62520
gctataaaaa	acataattac	aacgagcata	tttataaata	tttttattca	gcattacttg	62580
atatagtaat	attaggcaca	gtcaaacatt	caaccactct	cgatacatta	actctctcat	62640
tttctttaac	aaattctgca	atatcttcgt	aaaaagattc	tgaaaacttt	ttagaatatc	62700
tatcgactct	agatgaaata	gcgttcgtca	acatactatg	ttttgtatac	ataaaggcgc	62760
ccattttaac	agtttctagt	gacaaaaatgc	tagcgatcct	aggatccttt	agaatcacat	62820
agattgacga	ttcgtctctc	ttagtaactc	tagtaaaata	atcatacaat	ctagtacgcg	62880
aaataatatt	atccttgact	tgaggagatc	taaacatct	agttttgaga	acatcgataa	62940
gttcatcggg	aatgacatac	atactatctt	taatagaact	cttttcatcc	agttgaaatg	63000

-continued

---

attcgtectt aaccaactga ttaatgagat cttctatctt atcattttcc agatgatatg 63060  
 tatgtccatt aaagttaaat tgtgtagcgc ttcttttttag tctagcagcc aatactttaa 63120  
 catcactaat atcgatatac aaaggagatg atttatctat ggtattaaga attcgttttt 63180  
 cgacatctgt caaaaaccaat tcctttttgc ctgtatcatc cagttttcca tcctttgtaa 63240  
 agaaattatt ttctactaga ctattaataa gactgataag gattcctcca taattgcaca 63300  
 atccaaactt ttaacaaaa ctgacttta caagatctac aggaatgcgt acttcaggtt 63360  
 tccttagcttg tgattttttc ttttgccgac atttcttagt aaccaactca tctaccattt 63420  
 cattgatttt agcagtgaaa taagctttca atgcacgggc actgatacta ttgaaaacga 63480  
 gttgatcttc aaattccgcc atttaagttc accaaacaac ttttaatac aaatatatca 63540  
 atagtagtag aataagaact ataaaaaaaa taataattaa ccaataccaa ccccaacaac 63600  
 cggatattatt agttgatgtg actgttttct catcacttag aacagattta acaatttcta 63660  
 taaagtctgt caaatcatct tccggagacc ccataaatc accaaatata gcggcgtaca 63720  
 acttatccat ttatacattg aatattggct tttctttatc gctatcttca tcatattcat 63780  
 catcaatc aacaagtccc agattacgag ccagatcttc ttctacattt tcagtcattg 63840  
 atacacgttc actatctcca gagagtcca taacgttagc caccacttct ctatcaatga 63900  
 ttagtttctt gagegcgaat gtaatttttg ttccggttcc ggatctatag aagacgatag 63960  
 gtgtgataat tgccttggcc aattgtcttt ctcttttact gagtgattct agttcactt 64020  
 ctatagatct gagaatggat gattctocag tcgaaacata ttctaccatg gatccgttta 64080  
 atttgttgat gaagatggat tcatecttaa atgttttctc tgtaatagtt tccaccgaaa 64140  
 gactatgcaa agaatttga atgcgttctc tgtgcttaat gtttccatag acggcttcta 64200  
 gaagttgata caacatagga ctgaccgagg taacttttat ttttagaaa tatccatcgc 64260  
 ttctatcttg tttagattta tttttataaa gtttagtctc tccttccaac ataataaaaag 64320  
 tggaagtc attgactagat aaactatcag taagttttat agagatagac gaacaattag 64380  
 cgtattgaga agcatttagt gtaacgtatt cgatacattt tgcattagat ttactaatcg 64440  
 attttgcata ctctataaca cctgcacaag tctgtagaga atcgctagat gcagtaggtc 64500  
 ttggtgaagt ttcaactctc ttcttgatta ccttactcat gattaaacct aaataattgt 64560  
 actttgtaat ataatgat atattttcac tttatctcat ttgagaataa aaatgttttt 64620  
 gtttaaccac tgcattgatg acagatttcc gaatcgcaa ccaccagtgg ttttatttta 64680  
 tccttgcca atgtgaattg aatgggagcg gatgcgggtt tcgtacgtag atagtaactt 64740  
 cccgttttta gaccgagact ccatccgtaa aaatgcatac tcgttagttt ggaataactc 64800  
 ggatctgcta tatggatatt catagattga ctttgatcga tgaaggctcc cctgtctgca 64860  
 gccattttta tgatcgtctt ttgtggaatt tcccaaatag tttataaac tcgcttaata 64920  
 tcttctggaa ggtttgtatt ctgaatggat ccacatctg ccataactct attcttgatc 64980  
 tcatattcc ataattttct ctccgttaaa actctaagga gatgcggatt aactacttga 65040  
 aattctccag acaactctc ccgagtgtaa atattactgg tatacgggtc caccgactca 65100  
 ttatttccca aaatttgagc agttgatgca gtcggcatag gtgccacca taaactattt 65160  
 ctaagaccgt atgttctgat tttatcttt agaggttccc aattccaaag attcgacggg 65220  
 acaacattcc aaagatcata ttgtagaata ccgttactgg cgtacgatcc tacatatgta 65280  
 tcgtatggtc cttccttctc agctagttca caactgcct ctaatgcacc gtaataaatg 65340

-continued

---

gtttcgaaga tcttcttatt tagatcttgt gcttccaggc tatcaaatgg ataatttaag 65400  
agaataaacg cgctcgctaa tccttgaaca ccaataccga taggtctatg tctcttatta 65460  
gagatttcag cttctggaat aggataataa ttaatatcta taattttatt gagatttctg 65520  
acaattactt tgaccacatc cttcagtttg agaaaatcaa atcgccatc tattacaaac 65580  
atggtcaagg caacagatgc cagattacaa acggctacct cattagcatc cgcatattgt 65640  
attatctcag tgcaagatt actacacttg atagttccta aattttgttg attactcttt 65700  
ttgttacacg catccttata aagaatgaat ggagtaccag tttcaatctg agattctata 65760  
atcgctttcc agacgactcg agcctttatt atagatttgt atctccttc tctttcgtat 65820  
agtgtataca atcgttcgaa ctgctctccc caaacattgt ccaatccagg acattcatcc 65880  
ggacacatca acgaccactc tccgtcatcc ttcactcgtt tcataaagag atcaggaatc 65940  
caaagagcta taaatagatc tctggttcta tgttctcgt ttcctgtatt ctttttaaga 66000  
tcgaggaacg ccataatata agaatgccac ggttccaagt atatggccat aactccaggc 66060  
cgtttgtttc ctccctgatc tatgtatcta gcggtgttat tataaactct caacattgga 66120  
ataataccgt ttgatatacc attggtaccg gagatatagc ttccactggc acgaatatta 66180  
ctaattgata gacctattcc cctgcccatt ttagagatta atgcgcatcg ttttaacgtg 66240  
tcatagatac cctctatgct atcatcgatc atgttaagta gaaaacagct agacatttgg 66300  
tgacgactag ttcccgcatt aaataaggta ggagaagcgt gcgtaaacca tttttcagaa 66360  
agtagattgt acgtctcaat agctgagtct atatccatt gatgaattcc tactgcgaca 66420  
cgcattaaca tgtgctgagg tctttcaacg atcttggtgt ttattttcaa caagtaggat 66480  
ttttccaaag ttttaaaacc aaaatagttg tatgaaaagt ctggttcgta aataataacc 66540  
gagttgagtt tacccttata tttgttaact atatccatgg tgatacttga aataatcgga 66600  
gaatgtttcc catttttagg attaacatag ttgaataaat cctccatcac ttcactaaat 66660  
agtttttttg tttccttgty tagatttgat acggctatcc tggcggttag aatggcataa 66720  
tccggatggt gtgtagtaca agtggctgct atttcgctg ccagagtgc caattctacc 66780  
gttgttactc cattatatac tccttgaata accttcacat ctattttaat aggatctata 66840  
tgatccgtgt ttaagccata acataatttt ctaatcacgag acgtgatttt atcaaacatg 66900  
acattttctc tgtatccatt tcgtttaatg acaaacattt ttgttggtgt aataaaaaaa 66960  
ttatttaact tttcattaat agggatttga cgtatgtagc gtacaaaatg atcgttctc 67020  
gtatatagat aaagagtcct atatatattga aaatcgttac ggctcgatta aactttaatg 67080  
attgcatagt gaatatatca ttaggattta actccttgac tatcatggcg gcgccagaaa 67140  
ttaccatcaa aagcattaat acagttatgc ctatcgcatg tagaacggtt atagcatcca 67200  
ccatttatat ctaaaaaatta gatcaaaaga tatgtgacaa agtcctagtt gtatactgag 67260  
aattgacgaa acaatgtttc ttacatattt ttttcttatt agtaactgac ttaatagtag 67320  
gaactggaaa gctagacttg attattctat aagtatagat acccttccaa ataatttct 67380  
ctttgataaa agttccagaa aatgtagaat tttttaaaaa gttatctttt gctattacca 67440  
agattgtggt tagacgctta ttattaatat gagtgatgaa atccacaccg cctctagata 67500  
tcgcctttat ttccacatta gatggtaaat ccaatagtgaa aactatcttt ttaggaatgt 67560  
atggactcgc gtttagagga gtgaacgtct tgggcgtcgg aaaggatgat tcgtcaaacg 67620  
aataaacaat ttcacaaatg gatgttaatg tattagtagg aaattttttg acgctagtgg 67680  
aattgaagat tctaatggat gatgttctac ctatttctac cgataacatg ttaatttccg 67740

-continued

---

acaccaacgg ttttaatat tccgatgat acggtagtct ctctttcggg cttatatagc 67800  
ttattccaca atacgagtca ttatatactc caaaaaacaa aataactagt ataaaatctg 67860  
tatcgaatgg gaaaaacgaa attatcgaca taggtataga atccggaaca ttgaacgtat 67920  
taataactta tcttttttct gtggtaagta ccgatagggt attgacattg tatggtttta 67980  
aatattctat aacttgagac ttgatagata ttagtgatga attgaaaatt atttttatca 68040  
ccacgtgtgt ttcaggatca tcgctgacgc ccgtcaacca accgaatgga gtaaaataaa 68100  
tatcattaat atagtctcta gatattagta tttttatcaa tcttttgatt atcatcttct 68160  
cgtaggcgaa tgattccatg atcaagagtg atttgagaac atcctccgga gtattaatgg 68220  
gcttagtaaa cagtcacatg ttgcaataat aaaagttatc caagttaaag gatattatgc 68280  
attcgtttaa agatatacacc tcactcgacg gagacaattt tttggtaggt tttagagact 68340  
ttgaagctac ttgtttaaca aagttattca tcgctgctca ctattctatt taattttgta 68400  
gttaatttat cacatatcac attaattgac tttttgggcc atttttccat acgttttat 68460  
tcttttaate ctgcgttate cgtttccggt ataccaggg atagatcttg caagttaaat 68520  
agaatgctct taaataatgt cattttctta tccgctaaaa atttaaagaa tgtataaacc 68580  
tttttcagag atttgaaact cttagggtgt gtcctagtac acaatatcat aaacaaacta 68640  
ataaacatcc cacattcaga ttccaacagc tgattaactt ccacattaat acagcctatt 68700  
ttcgtctcaa atgtacatcc gaaaaatctg aataaaacat cgatgacaca atttgatta 68760  
tccaatacag aatgtctgtg attcgtgtta aaacatcgg agaaggaata aaaaaaaaa 68820  
ttattatagt ggtggaatcc agttggaata ttgcctccgg agtcataaaa ggatactaaa 68880  
cattgttttt tatcataaat tacacatttc caatgagaca aataacaaaa tccaacatt 68940  
acaaatctag aggtagaact ttttaatttg tctttaagta tatacgataa gatatgttta 69000  
ttcataaacg cgtcaaatcc ttcattgaat gctaaagggt ttaagaatct catgtcaaat 69060  
tgtcctatat aatccacttc ggatccataa gcaaacctgag agactaagtt cttaactctt 69120  
cgattgctca tccaggtccc tctctcaggc tctattttca tcttgacgac ctttgattt 69180  
tcaccagtat gtattccttt acgtgataaa tcactgattt tcaaatccat ttgtgagaag 69240  
tctatcgct tagatacttt tcccgtagt cgaggtttaa aaaaatacgc taacggtata 69300  
ctagtaggta actcaaaaac atcatatata gaatggtaac gcgtctttaa ctcgctgggt 69360  
aactctttct tttgatcgag ttgcctgcta ctattgggtc tgctcagggt ccccgactct 69420  
actagttcca acatcatacc gataggaata caagacactt tgccggcggg ttagatttta 69480  
tcatatttct ccactacata tccggtacaa tttgttaaaa atttagatc atctatattg 69540  
ctacataatc cagctagtga atatatatga cataataaat tggtaaatcc tagttctggt 69600  
attttactaa ttactaaatc tgtatatctt tccatttacc atggaaaaga atttaccaga 69660  
tatcttcttt tttccaaact gcgttaaatgt attctcttac aaatattcac aagatgaatt 69720  
cagtaatatg agtaaaacgg aacgtgatag tttctcattg gcggtgttcc cagttataaa 69780  
acatagatgg cataacgcac acgttgtaaa acataaagga atatacaaaag ttagtacaga 69840  
agcacgtgga aaaaaagtat ctctctccac actaggaaaa cccgcacaca taaacctaac 69900  
cgcaagcaa tatatatata gtgaacacac aataagcttt gaattgtata gttttctaaa 69960  
atgtataaca aatacagaaa tcaatctggt cgatgagtat atattaagag gactattaga 70020  
agctggtaat agtttacaga tattttocaa ttcgtaggtt aaacgaacag atactatag 70080

-continued

---

tgtactaggg	aataagtatc	catttagcaa	aattccattg	gcctcattaa	ctcctaaagc	70140
acaacgagag	atattttcag	cgtggatttc	tcatagacct	gtagttttaa	ctggaggaac	70200
tggagtgggt	aagacgtcac	aggtacccaa	gttattgctt	tggtttaatt	atatttttg	70260
tggattctct	actctagata	aatcaactga	ctttcacgaa	agaccagtca	ttctatctct	70320
tcctaggata	gctttagtta	gattgcatag	caataccatt	ttaaaatcat	tgggatttaa	70380
ggtactagat	ggatctccta	tttctttacg	gtacggatct	ataccggaag	aattaataaa	70440
caaacaccca	aaaaaatatg	gaattgtatt	ttctacccat	aagttatctc	taacaaaact	70500
atthagttat	ggcactctta	ttatagacga	agttcatgag	catgatcaaa	taggagatat	70560
tattatagca	gtacggagaa	agcatcatac	gaaaatagat	tctatgtttt	taatgactgc	70620
cacgttagag	gatgaccgag	aacggctaaa	agtattttta	cctaatcccg	catttataca	70680
tattcctgga	gatacactgt	ttaaaattag	cgaggtattt	atccataata	agataaatcc	70740
atcttccaga	atggcataca	tagaagaaga	aaagagaaat	ttagttactg	ctatacagat	70800
gtatactcct	cctgatggat	catccgggat	agtctttgtg	gcacccgttg	cacagtgtca	70860
cgaatataaa	tcatatttag	aaaaaagatt	accgtatgat	atgtatatta	ttcatggtaa	70920
ggtcttagat	atagacgaaa	tattagaaaa	agtgtattca	tcacctaatg	tatcgataat	70980
tatttctact	ccttatttgg	aatccagcgt	tactatacgc	aatgttacac	acatttatga	71040
tatgggtaga	gtttttgtcc	ccgctccttt	tggaggatcg	caacaattta	tttctaaatc	71100
tatgagagat	caacgaaaag	gaagagtagg	aagagttaat	cctggtacat	acgtctattt	71160
ctatgatctg	tcttataatga	agtctataca	gcgaatagat	tcagaatttc	tacataatta	71220
tatattgtac	gctaataagt	ttaatctaac	actccccgaa	gatttgttta	taatccctac	71280
aaatttggat	attctatggc	gtacaaagga	atatatagac	tcgttcgata	ttagtacaga	71340
aacatggaat	aaattattat	ccaattatta	tatgaagatg	atagagtatg	ctaaacttta	71400
tgtactaagt	cctattctcg	ctgaggagtt	ggataacttt	gagaggacgg	gagaattaac	71460
tagtattgta	cgagaagcca	ttttatctct	aaatttacga	attaagattt	taaaatttaa	71520
acataaagat	gatgatacgt	atatacactt	ttgtaaata	ttattcgggtg	tctataacgg	71580
aacaaacgct	actatatatt	atcatagacc	tctaacggga	tatatgaata	tgatttcaga	71640
tactatattt	gttctgttag	ataataacta	aaaatcaaac	tctaatgacc	acatcttttt	71700
ttagagatga	aaaattttcc	acatctcctt	ttgtagacac	gactaaacat	tttgacgaaa	71760
aaagtttatt	agtgtttaga	taatcgtata	cttcatcagt	gtagatagta	aatgtgaaca	71820
gataaaaagg	attcttgcct	aatagattgg	taaattccat	agaatatatt	aatcctttct	71880
tcttgagatc	ccacatcatt	tcaaccagag	acgttttctc	caatgattta	cctcgtacta	71940
taccacatac	aaaactagat	tttgcagtga	cgctcgtacct	ggatttccta	ccaaacaaaa	72000
ttttactttt	agttctttta	gaaaattcta	aggtagaato	tctatttgcc	aatatgtcat	72060
ctatggaatt	accactagca	aaaaatgata	gaaatatata	ttgatacatc	gcagctgggt	72120
ttgatctact	atactttaa	aacgaatcag	attccataat	tgctgtgata	tcatcagctg	72180
aaaaactatg	ttttacacgt	attccttcgg	catttctttt	taatgatata	tcttgtttag	72240
acaatgataa	agttatcatg	tccatgagag	acgcgtctcc	gtatcgtata	aatatttcat	72300
tagatgtag	acgttcatt	agggtatc	ttctataagg	tttcttaate	agtcocatcat	72360
tggttgcgtc	aagaactact	atcggatggt	gtgggtatc	tctagtgtta	cacatggcct	72420
tactaaagtt	tgggtaaata	actatgat	ctctattaat	tatagatgca	tatatttcat	72480

-continued

---

togtcaagga	tattagtatc	gacttgctat	cgtcattaat	acgtgtaatg	taatcatata	72540
aatcatgcga	tagccaagga	aaattcaaat	agatgttcat	catataatcg	tcgctataat	72600
tcatattaat	acgttgacat	tgactaattt	gtaatatagc	ctcgccacga	agaaagctct	72660
cgtattcagt	ttcatcgata	aaggataccg	ttaaatataa	ctggttgccc	atagtctcat	72720
agtctattaa	gtggaaggtt	tcgtacaaat	acagaatccc	taaaatatta	tctaagtgtg	72780
gattaatctt	taccataact	gtataaaatg	gagacggagt	cataactatt	ttaccgtttg	72840
tacttactgg	aatagatgaa	ggaataatct	cggacatgc	tggtaaagac	ccaaatgtct	72900
gtttgaagaa	atccaatggt	ccaggtocta	atctcttaac	aaaaattacg	atattcgatc	72960
ccgatatcct	ttgcattcta	tttaccagca	tatcacgaac	tatattaaga	ttatctatca	73020
tgtctattct	cccaccgta	tataaatcgc	ctccgctaag	aaacgtagt	atatccatac	73080
aatggaatac	ttcatttcta	aaatagtatt	cgttttctaa	ttctttaatg	tgaaatcgta	73140
tactagaaag	ggaaaaaatta	tctttgagtt	ttccgttaga	aaagaaccac	gaaactaatg	73200
ttctgattgc	gtccgatttc	ggtgctgaat	taatggattt	acacaaaaaa	ctcatataac	73260
ttctagatgt	agaagcattc	gctaaaaaat	tagtagaatc	aaaggatata	agtagatggt	73320
ccaacaagtg	agcaattccc	aagatttcat	ctatatcatt	ctcgaatccg	aaattagaaa	73380
ttccaagta	gatatccttt	ttcatccgat	cgttgatgaa	aatacgaact	ttattcggta	73440
agacaatcat	ttactaagga	gtaaaatagg	aagtaatggt	cgtatgtcgt	tatcatcgta	73500
taaattaaag	gtgtgttttt	taccattaag	tgacattata	atthttacca	tattggaatt	73560
ataatatagg	tgtatttgcg	cactcgcgac	ggttgatgca	tcggtaaata	tagctgtatc	73620
taatgttcta	gtcggatatt	catcatttcg	ctgtctaata	atagcgtttt	ctctatctgt	73680
ttccattaca	gctgcctgaa	gtttattggt	cggataaat	gtaaaaaat	aagaaataca	73740
tacgaataac	aaaaataaaa	taagatataa	taaagatgcc	atthtagagat	ctaattttgt	73800
ttaacttgtc	caaattccta	cttacagaag	atgaggaatc	gthggagata	gtgtcttcct	73860
tatgtagagg	atthgaaata	tcttataatg	acttgataac	ttactttcca	gataggaaat	73920
accataaata	tattttctaaa	gtatttgaac	atgtagattt	atcggaggaa	ttaagtatgg	73980
aattccatga	tacaactctg	agagatttag	tctatcttag	attgtacaag	tattccaagt	74040
gtatacggcc	gtgttataaa	ttaggagata	atctaaaagg	catagttggt	ataaaggaca	74100
ggaatattta	tattagggaa	gcaaatgatg	acttgataga	atatctcctc	aaggaataca	74160
ctcctcagat	ttatacatat	tctaattgagc	gcgtccccc	aactggttca	aaattaattc	74220
tttgtggatt	ttctcaagtt	acattttatgg	cgtatacaac	gtcgcataata	acaacaaata	74280
aaaaggtaga	tgttctcgtt	tccaaaaaat	gtatagatga	actagtcgat	ccaataaatt	74340
atcaaaact	tcaaaattta	tttgataaag	gaagcggaac	aataaacaaa	atactcagga	74400
agatatttta	ttcggtaaca	ggtggccaaa	ctccataatt	tgctttttct	atttcggatt	74460
ttagaatttc	caaattcacc	agcgattttat	cggttttggt	gaaatccaag	gatttattaa	74520
tgtccacaaa	tgccatttgt	tttgtctgtg	gattgtattt	gaaaatggaa	acgatgtagt	74580
tagatagatg	cgtgcgaag	tttcttatta	gggttccgcg	cttcacgtca	cccagcatac	74640
ttgaatcacc	atcctttaaa	aaaaatgata	agatatcaac	atggagtata	tcatactcgg	74700
atthtaattc	ttctactgca	tcactgacat	tttcacaaat	actacaatac	ggtttaccga	74760
aaataatcag	tacgttcttc	atthtatgggt	atcaaaaact	taaaatcggt	actgctggaa	74820

-continued

---

```

aataaatcac tgacgatatt agatgataat ttatacaaaag tatacaaatgg aatatttgtg 74880
gatacaatga gtattttatat agccgtogcc aattgtgtca gaaacttaga agagttaact 74940
acggatttca taaaaatcgt aaacggatgg gtaaaaaagg gagggcatgt aacccttttt 75000
atcgatagag gaagtataaa aattaaacaa gacgtagag acaagagacg taaatattct 75060
aaattaacca aggacagaaa aatgctagaa ttagaaaagt gtacatccga aatacaaaat 75120
gttaccggat ttatggaaga agaataaag gcagaaatgc aattaaaaat cgataaactt 75180
acatttcaa tatatttatac tgattctgat aacataaaaa tatcattgaa tgagatacta 75240
acacatttca acaataatga gaatgttaca ttattttatt gtgatgaacg agacgcagaa 75300
ttcgttatgt gtctcgaggc taaaacacat ttctctacca caggagaatg gccgttgata 75360
ataagtacog atcaggatac tatgctattt gcactgctg ataactcatcc taagatgata 75420
aaaaacttaa ctcaactgtt taaatttgtt cctcggcag aggataacta tttagcaaaa 75480
ttaacggcgt tagtgaatgg atgtgatttc ttctctggac tctatggggc atctataaca 75540
cccaccaact taaacaaaat acaattgttt agtgatttta caatcgataa tatagtcact 75600
agtttgcaa ttaaaaatta ttatagaaag actaactcta ccgtagacgt gcgtaaatatt 75660
gttacgttta taaacgatta cgtaattta gacgatgtct actcgatat tctccttgt 75720
caatgcactg ttcaagaatt tatattttcc gcattagatg aaaaatggaa tgaatttaaa 75780
tcatcttatt tagaaagcgt gccgttacc tgtaaatga tgtacgcgtt agaaccacgc 75840
aaggagattg atgtttcaga agttaaaact ttatcatctt atatagattt cgaaaatact 75900
aatcagata tcgatgttat aaaatctata tctcogactc tcggatattc taacgaaaac 75960
tgtaacacga tagtattcgg catctataag gataatttac tactgagtat aaatagtcca 76020
ttttacttta acgatagtct gttaataacc aataactaaa gtgataatat aataaatata 76080
ggttactaga ttaaaaatgg tgttccaact cgtgtgctct acgtgcggta aagatatttc 76140
tcacgaacga tataaattga ttatacgaaa aaaatcatta aaggatgtac tcgtcagtg 76200
aaagaacgaa tgtgttaggt taaaattatc tacacaaata gaacctcaac gtaacttaac 76260
agtgcaacct ctattggata taaactaata tggatccggt taattttatc aagacatatg 76320
cgcctagagg ttctattatt tttattaatt ataccatgtc attaacaagt catttgaatc 76380
catcgataga aaaacatggt ggtatttatt atggtagctt attatcgga cacttggtag 76440
ttgaatctac ctatagaaaa ggagttcgaa tagtccatt ggatagtttt tttgaaggat 76500
atcttagtgc aaaagtatac atgttagaga atattcaagt tatgaaaata gcagctgata 76560
cgtcattaac tttattgggt attcctgatg gatttggta taatagaatg tattgtttta 76620
aattggtagc tgaatgttat aaaaatgccg gtattgatac atcgtctaaa cgaatattgg 76680
gcaaagatat tttctgagc caaaacttca caaacgataa tagatggata aagatatatg 76740
attctaataa tttaacatth tggcaaatg attacctaa agggtaggtt aatatgcata 76800
actactctc cgttgttttt tccctcgttc tttttctaa cgttgtttgc catcactctc 76860
ataatgtaaa gatattctaa aatggtaaac ttttgcata cggacgcaga aattggata 76920
aatgttgtaa ttgtattatt tcccgcaat ggactagtca cagctccatc agttttatat 76980
cctttagagt atttctcact cgtgtctagc attctagagc attccatgat ctgtttatcg 77040
ttgatattgg ccgaaagat agatttttta ttttttatta tattactatt ggcaattgta 77100
gatataactt ctggtaaaata tttttctacc ttttcaatct cttctattht caagccggct 77160
atatattctg ctatattgtt gctagatca atacctttc tggctaagaa gtcatatgtg 77220

```

-continued

---

gtattcacta tatecagtttt aactggtagt tccattagcc tttccacttc tgcagaataa 77280  
 tcagaaattg gttctttacc agaaaatcca gctactataa taggctcacc gatgatcatt 77340  
 ggcaaaatcc tatattgtac cagattaatg agagcatatt tcatttccaa taattctgct 77400  
 agttcttgag acattgatgt atttgatgaa tctagtgggt tctctagata ctctaccatt 77460  
 tctgccgcac acaataactt gttagataaa atcagggtta tcaaagtgtt tagcgtggct 77520  
 agaatagtgg gcttgcacgt attaaagaat gcggtagtat gagtaaacccg ttttaacgaa 77580  
 ttatatagtc tccagaaatc tgtggcggtta catacatgag ccgaatgaca tcgaagattg 77640  
 tccaatattt ttaatagctg ctctttgtcc attatttcta tatttgactc gcaacaattg 77700  
 tagataccat taatcacoga ttcctttttc gatgctggac aatagcacia ttgttttagct 77760  
 ttggactcta tgtattcaga attaatagat atatctctca atacagattg cactatacat 77820  
 tttgaaacta tgtcaaaaat tgtagaacga cgctgttctg cagccattta actttaaata 77880  
 atttcaaaaa attttaaattg agcatccgta taaaaatcga taaactgcgc caaattgtgg 77940  
 catatttttc agagttcagt gaagaagtgt ctataaatgt agactcgacg gatgagttaa 78000  
 tgtatatttt tgccgccttg ggcggatctg taaacatttg ggccattata cctctcagtg 78060  
 catcagtgtt ctaccgagga gccgaaaaca ttgtgtttaa tcttctctg tccaaggtaa 78120  
 aatcgtgttt gtgtagtttt cacaatgatg ccatcataga tatagaacct gatctggaaa 78180  
 ataacttagt aaaactttct agttatcatg tagtaagtgt cgattgtaac aaggaactga 78240  
 tgcctattag gacagatact actattttgc taagtataga tcaaaagaaa tcttatgtgt 78300  
 ttaattttca caagtatgaa gaaaaatgtt gtggtagaac cgctattcat ctagaatggt 78360  
 tgttgggctt tatcaagtgt attagtcagc atcagcatct ggctattatg tttaaagatg 78420  
 acaatattat tatgaagact cctggtaata ctgatgcatt tccagggaa tattctatga 78480  
 ctgaatgttc tcaagaacta caaaagtfff ctttcaaaat agctatctcg tctctcaaca 78540  
 aactacgagg attcaaaaag agagtcaatg tttttgaaac tagaatcgta atggataatg 78600  
 acgataacat tttaggaatg ttgttttcgg atagagttca atcctttaag atcaacatct 78660  
 ttatggcgtt tttagattaa tactttcaat gagataaata tgggtggcgg agtaagtgtt 78720  
 gagctcccta aacgggatcc gcctccggga gtaccactg atgagatgtt attaaactg 78780  
 gataaaatgc atgacgtgat agctcccgt aagcttttag aatatgtgca tataggacca 78840  
 ctagcaaaaag ataagagga taaagtaaag aaaagatata cagagtttag attagtaaac 78900  
 acaggaccog gtggtctttc agcattgtta agacaatcgt ataaggaac cgcacccaat 78960  
 tgctgtcgca cttttaatcg tactcattat tgggaagaagg atggaaagat atcagataag 79020  
 tatgaagagg gtgcagtatt agaactgtgt tggccagacg ttcacgacac tggaaaatgc 79080  
 gatgttgatt tattcagctg gtgtcagggg gatacgttcg atagaacat atgccatcag 79140  
 tggatcgggt cagcctttaa taggagtgat agaactgtag agggtaaca atcgttaata 79200  
 aatctgtata ataagatgca aacattatgt agtaagatg ctagtgtacc aatatgcaaa 79260  
 tcatttttgc atcatttacg cgcacacaat acagaagata gcaaaagat gatcgattat 79320  
 attctaagac aacagtctgc ggactttaa cagaaatata tgagatgtag ttatcccact 79380  
 agagataagt tagaagatc attaaaatg gcggaacctc gagaatgttg ggatccagag 79440  
 tgttcgaatg ccaatgttaa tttcttacta acacgtaatt ataataattt aggactttgc 79500  
 aatattgtac gatgtaatac tagcgtgaac aacttacaga tggataaac tctctcatta 79560

-continued

---

agattgtcat gtggattaag caatagtgat agattttcta ctgttcccggt caatagagca 79620  
 aaagtagttc aacataatat taacattcgt ttcgacctaa aattgcattt gatcagttta 79680  
 ttatctctct tggtaatatg gataactaatt gtagctattt aaatgggtgc cgcggcaagc 79740  
 atacagacga cgggtgaatac actcagcgaa cgtatctcgt ctaaattaga acaagaagcg 79800  
 aatgctagtg ctcaaaaa atgtgatata gaaatcggaa atttttatat cgcacaaaac 79860  
 catggatgta acctcactgt taaaaaatg tgctctgctg acgcggatgc tcagttggat 79920  
 gctgtgttat cagccgctac agaacaatat agtggattaa caccggaaca aaaagcatac 79980  
 gtgccagcta tgtttactgc tgcgttaaac attcagacga gtgtaaacac tgttgttaga 80040  
 gattttgaaa attatgtgaa acagacttgt aattctagcg cggctgtoga taacaaatta 80100  
 aagatacaaa acgtaatcat agatgaatgt tacggagccc caggatctcc aacaaatttg 80160  
 gaatttatta atacaggatc tagcaaagga aattgtgcca ttaaagcgtt gatgcaattg 80220  
 acgactaagg ccactactca aatagcacct agacaagttg ctggtacagg agttcagttt 80280  
 tatatgattg ttatcgggtg tataaatattg gcagcgttgt ttatgtacta tgccaagcgt 80340  
 atgctgttca catccaccaa tgataaaatc aaacttattt tagccaataa ggaaaacgctc 80400  
 cattggacta cttacatgga cacattcttt agaacttctc cgatggttat tgctaccacg 80460  
 gatatgcaaa actgaaaata tattgataat attttaatag attaacatgg aagttatcgc 80520  
 tgatcgtcta gacgatatag tgaacaaaaa tatagcggat gaaaaatttg tagattttgt 80580  
 tatacacggg ctagagcctc aatgtcctgc tatacttcga ccattaatta ggttgtttat 80640  
 tgatatacta ttatttgta tagtaattta ttttttacg gtacgtctag taagtagaaa 80700  
 ttatcaaatg ttgttgccgt tgggtggcgt agtcatcaca ttaactattt tttattactt 80760  
 tatactataa tagtactaga ctgacttcta acaaacatct cacctgccat aaataaatgc 80820  
 ttgatattaa agtcttctat ttctaacct attccatctg tggaaaataa tactctgaca 80880  
 ttatcgttaa ttgacacatc ggtgagtgat atgcctataa agtaataatc ttctttgggc 80940  
 acatatacca gtgtaccagg ttctaacaac ctatttactg gtgctcctgt agcatacttt 81000  
 ttctttacct tgagaatata catcgtttgc ttggtcaata gcgatatgtg attttttatc 81060  
 aaccactcga aaaagtaatt ggagtggtca tatcctctac gggctattgt ctcatggcgc 81120  
 tgtatgaaat ttaagtaaca cgactgtggt agatttgttc tatagagccg gttgcccga 81180  
 atagatagaa ctaccaatat gtctgtacaa atgttaacaa ttaattgatt aacagaaaaa 81240  
 acaatgttcg ttctgggaat agaaccaga ttaaaacaaa attcgttaga atatatgcca 81300  
 cgtttataca tggaaataaa aataactaca gtttgaaaaa taacagtatc atttaaacat 81360  
 ttaacttgcg gggtaattt cacaacttta ctgttttga actgttcaaa atatagcata 81420  
 gatccgtgag aaatacgttt agccgccttt aatagaggaa atcccaccgc ctttctggat 81480  
 ctcaccaaag acgatagttc tgaccagcaa ctcatttctt catcatccac ctgttttaac 81540  
 atataatagg caggagatag atatccgtca ttgcaatatt ccttctcgtg ggcacacaat 81600  
 ctaatattga taaaatctcc attctctctc ctgcatttat tatcttgttt cggtggetga 81660  
 ttaggctgta gtcttggttt aggccttggg atatcgttgt tgaatctatt ttggtcatta 81720  
 aatctttcat ttcttctcgg tatattttta tcacctcgtt tggttggatt tttgtctata 81780  
 ttatcgtttg taacatcggg acgggtatc atttatcaca aaaaaaactt ctetaaatga 81840  
 gtctactgct agaaaaactc atcgaagaag ataccatatt ttttgcagga agtatatctg 81900  
 agtatgatga tttacaaatg gttattgccc gcgcaaaatc caaatttcca agatctatgc 81960

-continued

---

tttctatfff taatatagta cctagaacga tgtcaaaata tgagttggag ttgattcata 82020  
 acgaaaatat cacaggagca atgtttacca caatgtataa tataagaaac aatttgggtc 82080  
 taggagatga taaactaact attgaagcca ttgaaaacta tttcttggat cctaacaatg 82140  
 aagttatgcc tcttattatt aataatacgg atatgactgc cgctattcct aaaaaaagtg 82200  
 gtaggagaaa gaataagaac atggttatct tccgtcaagg atcatcacct atcttgtgca 82260  
 ttttcgaaac tcgtaaaaag attaatatff ataaagaaa tatggaatcc gcgtcgactg 82320  
 agtatacacc tateggagac aacaaggctt tgatatctaa atatgcggga attaatgtcc 82380  
 tgaatgtgta ttctccttcc acatccataa gattgaatgc catttacgga ttcaccaata 82440  
 aaaataaact agagaaaact agtactaata aggaactaga atcgtatagt tctagccctc 82500  
 ttcaagaacc cattagggtta aatgattttc tgggactatt ggaatgtgtt aaaaagaata 82560  
 ttctctaac agatattccg acaaaggatt gattactata aatggagaat gttcctaaty 82620  
 tatactttaa tcctgtgttt atagagocca cgtttaaaca ttctttatta agtggtttata 82680  
 aacacagatt aatagtttta tttgaagtat tcggtgtatt cattctaata tatgtatfff 82740  
 ttagatctga attaaatag ttcttcatgc ctaaacgaaa aatacccgat cctattgata 82800  
 gattacgacg tgctaacta gcgtgtgaag acgataaatt aatgatctat ggattacat 82860  
 ggatgacaac tcaaacatct gcgttatcaa taaatagtaa accgatagtg tataaagatt 82920  
 gtgcaaagct tttcgatca ataaatggat cacaaccagt atctctaac gatgttcttc 82980  
 gcagatgatg attcattfff taagtattg gctagtcaag atgatgaatc ttcattatct 83040  
 gatataatgc aatcactca atactagac tttctgttat tattattgat ccaatcaaaa 83100  
 aataaattag aagccgtggg tcattgttat gaatctcttt cagaggaata cagacaattg 83160  
 acaaaattca cagactttca agattttaaa aaactgttta acaaggctcc tattgttaca 83220  
 gatggaaggg tcaaaactta taaaggatat ttgttcgact ttgtgattag tttgatgcca 83280  
 ttcaaaaag aatcctctct agctaccacc gcaatagatc ctgtagata catagatcct 83340  
 cgctcgata tcgcatfff taactgtatg gatataatga agtcgaataa agtgaacaat 83400  
 aattaattct ttattgtcat catgaacggc ggacatattc agttgataat cggcccatg 83460  
 ttttcaggtta aaagtacaga attaattaga cgagttagac gttatcaaat agctcaatat 83520  
 aatgcgtga ctataaaaata ttctaacgat aatagatacg gaacgggact atggacgcat 83580  
 gataagaata attttgaagc attggaagca actaaactat gcgatgtctt ggaattaatt 83640  
 acagatfff cctgatagg tatcgatgaa ggacagttct tccagacat tgttgaattc 83700  
 tgtgagcgta tggcaaacga aggaaaaata gttatagtag ccgcactcga tgggacattt 83760  
 caacgtaaac cgtttaataa tattttgaat cttattccat tatctgaaat ggtggtaaaa 83820  
 ctaactgctg tgtgtatgaa atgctttaag gaggcttct tttctaaacg attgggtgag 83880  
 gaaaccgaga taaaaataat aggaggtaat gatatgtatc aatcgggtgtg tagaaagtgt 83940  
 tacatcgact cataatatta tattttttat ctaaaaaact aaaaataaac attgattaaa 84000  
 ttttaataata atacttaaaa atggatgttg tgctcgttaga taaaccgttt atgtatfff 84060  
 aggaaattga taatgagttta gattacgaac cagaaagtgc aatgaggtc gcaaaaaaac 84120  
 tgccgtatca aggacagttta aactattac taggagaatt atttttctt agtaagttac 84180  
 agcgacacgg tatattagat ggtgccaccg tagtgtatat aggatctgct cccggtaac 84240  
 atatacgtta tttgagagat catttctata atttaggagt gatcatcaaa tggatgctaa 84300

-continued

---

ttgacggcgc	ccatcatgat	cctattctaa	atggattgcg	tgatgtgact	ctagtgactc	84360
ggttcggtga	tgaggaatat	ctacgatcca	tcaaaaaaca	actgcatcct	tctaagatta	84420
ttttaatttc	tgatgtaaga	tccaaacgag	gaggaaatga	acctagtacg	gcggtttac	84480
taagtaatta	cgctctacaa	aatgtcatga	ttagtatttt	aaaccccggtg	gcatctagtc	84540
ttaaattggag	atgcccgttt	ccagatcaat	ggatcaagga	cttttatatc	ccacacggta	84600
ataaaatggt	acaacctttt	gctccttcat	atcagctga	aatgagatta	ttaagtattt	84660
ataccggtga	gaacatgaga	ctgactcgag	ttaccaaatt	agacgctgta	aattatgaaa	84720
aaaagatgta	ctaccttaat	aagatcgtcc	gtaacaaagt	agttgttaac	tttgattatc	84780
ctaactcagga	atatgactat	tttcacatgt	actttatgct	gaggaccgtg	tactgcaata	84840
aaacatttcc	tactactaaa	gcaaaggtag	tatttctaca	acaatctata	ttcgttttct	84900
taaatattcc	aacaacatca	actgaaaaag	ttagtcatga	accaatacaa	cgtaaaaat	84960
ctagcaaaaa	ttctatgtct	aaaaacagaa	atagcaagag	atccgtacgc	ggtaataaat	85020
agaaacgtac	tactgagata	tactaccgat	atagagtata	atgatttagt	tactttaata	85080
accgttagac	ataaaattga	ttctatgaaa	actgtgtttc	aggtatttaa	cgaatcatcc	85140
ataaattata	ctccggttga	tgatgattat	ggagaaccaa	tattataaac	atcgtatcct	85200
caaaaaggtc	ataacaagtt	tctgttaaat	tttctataca	tagatgtggt	aatatctgac	85260
ttatttccta	gctttgttag	actagatact	acagaaacta	atatagttaa	tagtgtacta	85320
caaacagggtg	atggtaaaaa	gactcttctg	cttcccaaaa	tgtagagac	ggaaatagtt	85380
gtcaagattc	tctatcgccc	taatatacca	ttaaaaattg	ttagattttt	ccgcaataac	85440
atggttaactg	gagtagagat	agccgataga	tctgttattt	cagtcgctga	ttaatcaatt	85500
agtagagatg	agataagaac	attataataa	tcaataatat	atcttatatc	ttatatotta	85560
tatcttgttt	agaaaaatgc	taatattaaa	atagctaacg	ctagtaatcc	aatcggaagc	85620
catttgatat	ctataatagg	gtatctaatt	tctgtattta	aatagcggac	agctatattc	85680
tcggtagcta	ctcgtttgga	atcacaaaaca	ttatttacat	ctaatttact	atctgtaatg	85740
gaaacgtttc	ccaatgaaat	ggtacaatcc	gatacattgc	atcttggtat	atcttttttt	85800
aaagaggctg	gtaacaacgc	atcgcctcgt	ttacatggct	cgtaccaaca	ataatagggt	85860
aatcttgtat	ctattcctat	ccgtactatg	cttttatcag	gataaataca	tttacatcgt	85920
atctcgtcct	tgtagcatc	acagaatgca	taaatttgtt	cgtccgtcat	gataaaaatt	85980
taaagtgtaa	atataactat	tatttttata	gttgtataaa	aaagggaaat	ttgattgtat	86040
actttcgggt	ctttaaaaga	aactgacttg	ataaaaatgg	ctgtaatctc	taaggttacg	86100
tatagtctat	atgatcaaaa	agagattaat	gctacagata	ttatcattag	tcagttaaaa	86160
aatgacgacg	atctcgttac	cgttaaagat	ggtagactag	gtgctatgga	tggggcatta	86220
tgtaagactt	gtgggaaaac	ggaattgga	tgtttcggtc	actggggtaa	agtaagtatt	86280
tataaaactc	atatagttaa	gctgaattt	atctcagaaa	ttattcgttt	actgaatcat	86340
atattgtattc	actcgggatt	attgcgttca	cgagaaccgt	attccgacga	tattaaccta	86400
aaagagtatt	cgggacacgc	tcttaggaga	ttaaaggata	aaatattatc	caagaaaaag	86460
tcatgttggga	acagcgaatg	tatgcaaccg	tatcaaaaaa	ttactttttc	aaagaaaaag	86520
gtttgtttcg	tcaacaagtt	ggatgatatt	aacgttccta	attctctcat	ctatcaaaaag	86580
ttaatttcta	ttcatgaaaa	gttttggcca	ttattagaaa	ttcatcaata	tccagctaac	86640
ttattttata	cagactactt	tcccatccct	cgttggtatta	ttagaccggc	tattagtttt	86700

-continued

---

tggatagata	gtatacccaa	agaaccaat	gaattaactt	acttattagg	tatgatcgtt	86760
aagaattgta	acttgaatgc	tgatgaacag	gttatccaga	aggcggtaat	agaatacgat	86820
gatattaana	ttatttctaa	taacactacc	agtatcaatt	tatcatatat	cacatccggc	86880
aaaaataata	tgattagaag	ttatatcgtc	gcccggcgaa	aagatcagac	cgctagatct	86940
gtaattggtc	ccagtacatc	tatcacogtt	aatgaggtag	gaatgccgc	atatattaga	87000
aatacactta	cagaaaagat	atgtgttaat	gcctttacag	tgataaagt	taaacaacta	87060
ttagcgtcaa	accaagttaa	attttacttt	aataaacgat	taaaccaatt	aacaagaata	87120
cgccaaggaa	agtttatcaa	aaataaata	catttattgc	ctggtgattg	ggtagaagta	87180
gctgttcaag	aatatacaag	tattatTTTT	ggaagacagc	cgctctaca	tagatacaac	87240
gtcatcgctt	catctatcag	agctaccgaa	ggagatacta	tcaaaatatic	tcccgggaatt	87300
gccaactctc	aaaatgctga	tttcgacgga	gatgaagaat	ggatgatatt	agaacaaaat	87360
cctaaagctg	taattgaaca	aagtattctt	atgtatccga	cgacgttact	caaacacgat	87420
attcatggag	cccccgTTTA	tgatctatt	caagatgaaa	tcgtagcagc	gtattcattg	87480
tttaggatac	aagatctttg	tttagatgaa	gtattgaaca	tcttggggaa	atatggaaga	87540
gagttcgcac	ctaaaggtaa	atgtaaatc	agcggtaaag	atatctatac	ttacttgata	87600
ggtgaaaaga	ttaattatcc	gggtctctta	aaggatgggtg	aaattattgc	aaacgacgta	87660
gatagtaatt	ttgttgggc	tatgaggcat	ctgtcattgg	ctggactctt	atccgatcat	87720
aagtcgaacg	tggaaggtat	caactttatt	atcaagtcac	cttatgtttt	taagagatat	87780
ctatctatTT	acggttttgg	gggtgacattc	aaagatctga	gaccaaattc	gacgttccact	87840
aataaattgg	aggccatcaa	cgtagaaaaa	atagaactta	tcaagaagc	atagccaaa	87900
tatctcaacg	atgtaagaga	cgggaaaaata	gttccattat	ctaaagcttt	agaggcggac	87960
tatgtggaat	ccatgttatic	caacttgaca	aatcttaata	tccgagagat	agaagaacat	88020
atgagacaaa	cgctgataga	tgatccagat	aataacctcc	tgaaaatggc	caaagcgggt	88080
tataaagtaa	atcccacaga	actaatgtat	attctaggtg	cgatgggaca	acaaaggatt	88140
gatggtgaac	cagcagagac	tcgagtattg	ggtagagttt	taccttacta	tcttccagac	88200
tctaaggatc	cagaaggaag	aggttacatt	cttaattctt	taacaaaagg	attaacaggt	88260
tctcaatatt	acttttcgat	gctggttgcc	agatctcaat	ctactgatat	cgctctgtgaa	88320
acatcacgta	ccggaacact	ggctagaaaa	atcattaaaa	agatggagga	tatggtggtc	88380
gacggatacg	gacaagtagt	tataggtaat	acgctcatca	agtagccgc	caattatacc	88440
aaaattctag	gctcagtatg	taaacctgta	gatcttatct	atccagatga	gtccatgact	88500
tggtatTTTg	aaattagtgc	tctgtggaat	aaaataaac	agggattcgt	ttactctcag	88560
aaacagaaac	ttgcaaagaa	gacattggcg	ccgtttaatt	tcttagtatt	cgtaaaccc	88620
accactgagg	ataatgctat	taaggTTAag	gatctgtacg	atatgattca	taacgtcatt	88680
gatgatgtga	gagagaaata	cttctttacg	gtatctaata	tagatTTTat	ggagtatata	88740
ttcttgacgc	atcttaatcc	ttctagaatt	agaattacaa	aagaaacggc	tatcactatc	88800
tttggaaaagt	tctatgaaaa	actcaattat	actctaggtg	gtggaactcc	tattggaatt	88860
atTTctgcac	aggtattgtc	tgagaagttt	acacaacaag	ccctgtccag	ttttcacact	88920
actgaaaaaa	gtggtgccgt	caaacaaaaa	cttggTTTca	acgagTTTaa	taacttgact	88980
aatttgagta	agaataagac	cgaattatc	actctgggat	ccgatgatat	ctctaaactt	89040

-continued

---

caatctgtta agattaatth cgaatttcta tgtttgggag aattaaatcc aaacatcact 89100  
cttcgaaaag aaacagatag gtatgtagta gatataatag tcaatagatt atacatcaag 89160  
agagcagaaa ttaccgaatt agtcgtcgaa tatatgattg aacgattcat ctcttttagc 89220  
gtcattgtaa aggaatgggg tatggaaaca ttcattgagg atgaggataa tattagattt 89280  
actgtctacc taaatttcgt tgaaccggaa gaattgaatc ttagtaagtt tatgatggtt 89340  
cttcggggg cgcaccaaaa gggcaagatt agtaaatca agattcctat ctctgattat 89400  
acgggttatg acgacttcaa tcaaacaaaa aagctcaata agatgactgt agaactcatg 89460  
aatctaaaag aattgggttc tttcgatttg gaaaacgtca acgtgatcc tggagtatgg 89520  
aatacatacg atactctcg tatcgaggcc gctcgtgaat acttctgoga agccatgtta 89580  
aacacctatg gagaagggtt cgattatctg tatcagcctt gtgatcttct cgctagttta 89640  
ctatgtgcta gttacgaacc agaactcagtg aataaattca agttcggcgc agctagtact 89700  
cttaagagag ctacgttcgg agacaataaa gcattgttaa acgcggtctt tcataaaaag 89760  
tcagaaccta ttaacgataa tagtagctgc cactttttta gcaaggctcc taatatagga 89820  
actggatatt acaaaactt tatcgacttg ggtcttctca tgagaatgga aaggaaacta 89880  
tctgataaga tatcttctca aaagatcaag gaaatggaag aaacagaaga cttttaattc 89940  
ttatcaataa catatthttc tatgatctgt cttttaaagc atggatthtt cacaaatgcy 90000  
cctctcaagt ccctcataga atgatacacg tataaaaaat atagcatagg caatgactcc 90060  
ttatthtttag acattagata tgccaaaaat atagccccgc ttctatttac tccgcagca 90120  
caatgaacca acacgggctc gtttcgttga tcacatttag ataaaaaggc ggttacgctc 90180  
tcaaaatatt tactaatatc ggtagttgta tcatctacca acggtatatg aataatatta 90240  
atattagagt taggtaatgt atatthtacc atcgtcaaat ttaaaacata tttgaactta 90300  
acttcagatg atgggtgcatc catagcattt ttataatthc ccaaatacac attattggtt 90360  
acccttgtea ttatagtggt agatthggct ttgtgcatat ctccagttga acgtagtagt 90420  
aagtattht acaaaactth cttatccatt tataacgtac aaatggataa aactacttht 90480  
tcggtaaacg cgtgtaatth agaatacgtt agagaaaagg ctatagtagg cgtacaagca 90540  
gccaaaacat caaaccttat attctthgtt attatattgg caattagtg cgtattactc 90600  
tggtttcaga cgtctgataa tccagctctt aatgaattaa cgagatatat gcgaattaa 90660  
aatacggta acgattggaa atcattaacg gatagcaaaa caaaattaga aagtgataga 90720  
ggtaaaactc tagccgctgg taaggatgat atattcgact tcaaatgtgt ggatttcggc 90780  
gcctatthta tagctatgcy attggataag aaaacatata tgccgcaagc tattaggcga 90840  
ggactggag acgctgggat ggttaaaaag gcggcaagg tcgatccatc tgctcaaaa 90900  
thttgtcagt atttgataaa acacaagtct aataatgta tthctgtgg taatgagatg 90960  
ttaaataaat taggttatag cggttattht atgthaccgc attggtgttc cgattthtagt 91020  
aatatggaat agtgttagat aaatgcggtc acgaatgttc ctgtaaggaa ccataacagt 91080  
ttagatthaa cgttaaagat gagcataaac ataataaaca aaattacaat caaacctata 91140  
acattaatat caaacaatcc aaaaaatgaa atcagtggtg tagtaaacgc gtacataact 91200  
cctggataac gtttagcagc tgccgttcct attctagacc aaaaattgg thtcatgtht 91260  
tcgaaaacgtt attctgcaac aagtcgagga tctgttctca catatthggc ggcgthtacc 91320  
agtatctgcc tattgatctt cattctgtht tcgattctgg ctatthcaaa ataaaatccc 91380  
gatgatagac ctccagactt tataatthca tctacgatgt tcagcgcgt agtaactcta 91440

-continued

---

ataatatagg ctgataagct aacatcatac cctcctgtat atgtgaatat ggcatgattt 91500  
ttgtccatta caagctcggg ttttaacttta ttgcctgtaa taatttctct catctgtagg 91560  
atatctatatt ttttgcctatg cattgccttc aagacgggac gaagaaacgt aatatcctca 91620  
ataacgttat cgttttctac aataactaca tattctacct ttttatttcc taactcggta 91680  
aaaaaattag aatcccatag ggctaaatgt ctacgcgatat ttcttttctg ttcctctgta 91740  
cacatagtgt tacaaaaacc tgaagaagaag tgagtatact tgctcatcatt tctaattgtt 91800  
cctccagtcc actgtataaa cgcataatcc ttgtaatgat ctggatcacc cttgactacc 91860  
acaacatttc ttttttctgg cataacttcg ttgtccttta catcatcgaa cttctgatca 91920  
ttaatatgct catgaacatt aggaaatgtt tctgatggag gtctatcaat aactggcaca 91980  
acaataacag gagttttcac cgcgccatt tagttattga aattaatcat atacaactct 92040  
ttaatacagag ttatatatttc gtctatccat tgtttcacat tgacatattt cgacaaaaag 92100  
atataaaatg cgtattccaa tgcttctctg ttaaatgaat tactaaaata tacaaacacg 92160  
tcactgtctg gcaataaatg atatcttaga atattgtaac aatttatttt gtattgcaca 92220  
tgttcgtgat ctatgagttc ttcttcgaat ggcataggat ctccgaatct gaaaacgtat 92280  
aataggagt tagaataata atatttgaga gtattggtaa tatataaact ctttagcggg 92340  
ataattagtt tttttctctc aatttctatt tttagatgtg atggaaaaat gactaatttt 92400  
gtagcattag tatcatgaac tctaatacaa atcttaatat ctctgcaca cgttagctct 92460  
ttgaagtttt taagagatgc atcagttggg tctacagatg gagtaggtgc aacaattttt 92520  
tgttctacac atgtatgtac tggagccatt gttttaacta taatgggtct tgtatcgaaa 92580  
aactttaatg cagatagcgg aagctcttcg ccgcgacttt ctacgctgta attgggttct 92640  
aacgccgatc tctgaatgga tactagtttt ctaagttcta atgtgattct ctgaaaatgt 92700  
aaatccaatt cctccggcat tatagatgtg tatacatcgg taaataaaaac tatagtatcc 92760  
aacgatccct tctcgcaaat tctagtotta accaaaaaat cgtatataac cacggagatg 92820  
gcgtatttaa gagtggattc ttctaccgtt ttggtcttgg atgtcatata ggaaactata 92880  
aagtccgcac tactgttaag aatgattact aacgcaacta tatagttcaa attaagcatt 92940  
ttggaacat aaaataactc tgtagacgat acttgacttt cgaataagtt tgcagacaaa 93000  
cgaagaaaga acagacctct ctaatttca gaagaaaact tttttctgta ttctgacgt 93060  
ctagagttta tatcaataag aaagttaaga attagtcggg taatggtgta tttcattacc 93120  
caagtttgag atttcataat attatcaaaa gacatgataa tattaagat aaagcgtga 93180  
ctatgaacga aatagctata tggttcgtc aaaaatatag tcttggtaaa cgtggaaacg 93240  
ataactgtat ttttaatcac gtcagcggca tctaaattaa atataggtat atttattcca 93300  
cacactctac aatatgccac accatcttca taataaataa attcggttagc aaaattatta 93360  
attttagtga aatagttagc gtcaactttc atagcttctc tcaatctaatt ttgatgctcg 93420  
cacggtgcga attccactct aacatccctt ttccatgcct caggttcacc gatctctata 93480  
atatctagtt ttttgcgttt cacaaaacaca ggctcgtctc tcgcgatgag atctgtatag 93540  
taactatgta aatgataact agatagaaag atgtagctat atagatgacg atcctttaag 93600  
agaggataaa taactttacc ccaatcagat agactggtgt tatggcttcc ggaaaaagaa 93660  
ttttataaaa tttttccagt attttccaaa tatacgtact taacatctaa aaaatcctta 93720  
atgataatag gaatggataa tccgtctatt ttataaagaa atacatatcg cacattatac 93780

-continued

---

```

tttttttgg aaatgggaat accgatgtgt ctacataaat atgcaaagtc taaatatttt 93840
ttagagaatc ttagttgggc caaattcttt tccaagtacg gtaatagatt tttcatattg 93900
aacggtatct tcttaatctc tggttctagt tccgcattaa atgatgaaac taagtacta 93960
ttttataac taacgattac atcacctcta acatcatcat ttaccagaat actgatcttc 94020
ttttgtcgta aatacatgtc taatgtgta aaaaaagat catacaagtt atacgtcatt 94080
tcactctgtg tattctgtc attgaaggat aaactcgtac taatctcttc tttaacagcc 94140
tgttcaaatt tatactctat atacgaaaa atagcaacca gtgtttgatc atccgcgtca 94200
atattctgtt ctatcgtagt gtataacaat cgtatatctt cttctgtgat agtcgatagc 94260
ttataaagg tgaatacga aatattttta tttcgtgaaa taaagtcacg gtaggatttt 94320
ggacttatat tccgctctag taaatatgct tttatttttg gaatgatctc aattagaata 94380
gtctctttag agtccattta aagttacaaa caactaggaa attggtttat gatgtataat 94440
ttttttagtt tttatagatt ctttattcta tacttaaaaa atgaaaataa atacaagggt 94500
tcttgagggt tgtgttaaat tgaagcagag aaataatcat aaattatttc attatcgcga 94560
tatccgtaa gtttgatcgt taatggcgtg gtcaattaca aataaagcgg atactagtag 94620
cttcacaaag atggctgaaa tcagagctca tctaaaaaat agcgcgtgaaa ataaagataa 94680
aaacgaggat attttcccg aagatgtaat aattccatct actaagccca aaaccaaacg 94740
agccactact cctcgtaac cagcggctac taaaagatca accaaaaagg aggaagtgga 94800
agaagaagta gttatagagg aatatcatca aacaactgaa aaaaattctc catctcctgg 94860
agtcagcgac attgtagaaa gcgtggctgc tgtagagctc gatgatagcg acggggatga 94920
tgaacctatg gtacaagttg aagctggtaa agtaaatcat agtgctagaa gcgatctttc 94980
tgacctaaag gtggctaccg acaatatcgt taaagatctt aagaaaatta ttactagaat 95040
ctctgcagta tgcacggttc tagaggatgt tcaagcagct ggtatctcta gacaatttac 95100
ttctatgact aaagctatta caacactatc tgatctagtc accgagggaa aatctaaagt 95160
tgttcgtaaa aaagttaaaa cttgtaagaa gtaaatgcgt gcactttttt ataaagatgg 95220
taaaactctt accgataata attttttaa tcctgtatca gacgataatc cagcgtatga 95280
ggttttgcaa catgttaaaa ttctactca tttaacagat gtagtagtat atgaacaaac 95340
gtgggaggag gcgttaacta gattaatttt tgtgggaagt gattcaaaag gacgtagaca 95400
atacttttac gaaaaaatgc atgtacagaa tcgcaacgct aaaagagatc gtatttttgt 95460
tagagtatat aacgttatga aacgaattaa ttgttttata aacaaaaata taaagaaatc 95520
gtccacagat tccaattatc agttggcggg ttttatgtta atggaaaacta tgttttttat 95580
tagatttggg aaaatgaaat atcttaagga gaatgaaaca gtagggttat taacactaaa 95640
aaataaacac atagaaataa gtcccgatga aatagttatc aagttttag gaaaggacaa 95700
agtttcacat gaatttggg ttcataagtc taatagacta tataaacccg tattgaaact 95760
gacggatgat tctagtcccg aagaatttct gttcaacaaa ctaagtgaac gaaaggtata 95820
cgaatgatc aaacagtttg gtattagaat caaggatctc cgaacgatg gagtcaatta 95880
tacgttttta tataattttt ggacaaatgt aaagtccata tctctcttc cgtcacccaa 95940
aaagttaata gcattaacta tcaaacaaac tgctgaagtg gtaggtcata ctccatcaat 96000
ttcaaaaaga gcttatatgg caacgactat tttgaaatg gtaaaggata aaaaattttt 96060
agatgtagta tctaaaacta cgttcgatga attcctatct atagtcgtag atcacgttaa 96120
atcatctaog gatggatgat atagatcttt acacaaataa ttacaagacc gataaatgga 96180

```

-continued

---

aatggataag cgtatgaaat ctctcgcaat gacagctttc ttcggagagc taaacacatt 96240  
agatattatg gcattgataa tgtctatatt taaacgccat ccaaacaata ccattttttc 96300  
agtggataag gatggtcagt ttatgattga ttctgaatac gataattata aggcttctca 96360  
atatttggat ctgacctca ctccgatatc tggagatgaa tgcaagactc acgcatcgag 96420  
tatagccgaa caattggcgt gtgcggatata tattaagag gatattagcg aatatatcaa 96480  
aactactccc cgtcttaaac gatttataaa aaaataccgc aatagatcag atactcgcat 96540  
cagtcgagat acagaaaagc ttaaaatagc tctagctaaa ggcatagatt acgaatata 96600  
aaaagacgct tgttaataag taaatgaaaa aaaactagtc gtttataata aaacacgata 96660  
tggatgccaa cgtagtatca tcttctacta ttgcgacgta tatagacgct ttagcgaaga 96720  
atgcttcgga attagaacag aggtctaccg catacgaat aaataatgaa ttggaactag 96780  
tatttattaa gccgccattg attactttga caaatgtagt gaatatctct acgattcagg 96840  
aatcgtttat tcgatttacc gttactaata aggaaggtgt taaaattaga actaagattc 96900  
cattatctaa ggtacatggt ctgatgtaa aaaatgtaca gttagtagat gctatagata 96960  
acatagtttg gaaaaagaaa tcattagtga cggaaaatcg tcttcacaaa gaatgcttgt 97020  
tgagactatc gacagaggaa cgtcatatat ttttggatta caagaaatat ggatcctcta 97080  
tccgactaga attagtcaat cttattcaag caaaaaaaa aaactttacg atagacttta 97140  
agctaaaata ttttctagga tccggtgcc aatctaaaag ttctttatta cacgctatta 97200  
atcatccaaa gtcaaggcct aatcacctc tggaaaataga attcacacct agagacaatg 97260  
aaacagttcc atatgatgaa ctaataaagg aattgacgac tctatcacgt catatattta 97320  
tggcttctcc agagaatgta attctttctc cgcctattaa cgcgcttata aaaaccttta 97380  
tgttccttaa acaagatata gtaggtttgg atctggaaaa tctatatgcc gtaactaaga 97440  
ctgacggcat tcctataact atcagagtta catcaaacgg gttgtattgt tattttacac 97500  
atcttggta tattattaga taccctgta agagaataat agattccgaa gtagtagtct 97560  
ttggtgaggg agttaaggat aagaactgga ccgtatatct cattaagcta atagagcctg 97620  
tgaatgcaat caatgataga ctagaagaaa gtaagtatgt tgaatctaaa ctagtggata 97680  
tttgtgatcg gatagattc aagtcaaaga aatacgaagg tccgtttact acaactagtg 97740  
aagtcgctga tatgttatct acatatttac caaagcaacc agaaggtgtt attctgttct 97800  
attcaaaggg acctaaatct aacattgatt ttaaaattaa aaaggaaaat actatagacc 97860  
aaactgcaaa ttagtattt aggtacatgt ccagtgaacc aattatcttt ggagaatcgt 97920  
ctatctttgt agagtataag aaatttagca acgataaagg ctttcctaaa gaatatgggt 97980  
ctggtaatag tgtgttatat aacggcgta attatctaaa taatatctat tgtttggaat 98040  
atattaatac acataatgaa gtgggtatta agtccgtggt tgtacctatt aagtttatag 98100  
cagaattctt agttaatgga gaaacttata aacctagaat cgataaaacc atgaaatata 98160  
ttaactcaga agattattat ggaatcaac ataatatcat agtcgaacat ttaagagatc 98220  
aaagcatcaa aataggagat atctttaacg aggataaact atcggatgtg ggacatcaat 98280  
acgccaataa tgataaattt agatataatc cagaagttag ttattttacg aataaacgaa 98340  
ctagaggacc gttgggaatt ttatcaaac acgtcaagac tcttcttatt tctatgtatt 98400  
gttccaaaac atttttagac gattccaaca aacgaaaggt attggcgatt gattttggaa 98460  
acggtgctga cctggaaaaa tacttttatg gagagattgc gttattggta gcgacggatc 98520

-continued

---

cggatgctga tgctatagct agaggaaatg aaagatacaa caaatataac tctggaatta 98580  
aaaccaagta ctacaaatct gactacattc aggaaactat tcgatccgat acatttgtct 98640  
ctagtgtcag agaagtattc tattttggaa agtttaatat catcgactgg cagtttgcta 98700  
tccattattc ttttcatocg agacattatg ctaccgtcat gaataactta tccgaactaa 98760  
ctgcttctgg aggcaaggta ttaatcacta ccatggacgg agacaaatta tcaaataaa 98820  
cagataaaaa gacttttata attcataaga atttacctag tagcgaaaaac tatatgtctg 98880  
tagaaaaaat agctgatgat agaatagtgg tatataatcc atcaacaatg tctactccaa 98940  
tgactgaata cattatcaaa aagaacgata tagtcagagt gttaacgaa tacggatttg 99000  
ttcttgtaga taacgttgat ttcgctacaa ttatagaacg aagtaaaaag tttattaatg 99060  
gcgcatctac aatggaagat agaccgtcta caaaaaactt tttcgaacta aatagaggag 99120  
ccattaaatg tgaaggttta gatgtcgaag acttacttag ttactatggt gtttagtct 99180  
tttctaagcg gtaataata ataggtatg ggttctgata tccccgttct aaatgcatta 99240  
aataattcca atagagcgat ttttgttct ataggactt ccaactgtgg atactctgta 99300  
ttgttaatag atataatct acttttgcg ggtaacagag gttctacgct ttctaaaaat 99360  
aaaagtttta taacatctgg cctgttcata aataaaaaact tggcgattct atataactc 99420  
ttattatcaa atctagccat tgccttatag atgtgagcta ctgtaggtgt accatttgat 99480  
tttctttcta atactatata tttctctcga agaagttctt gcacatcctc tgggaataaa 99540  
ataactactg tgagtaaatc agttattttt tttatatcga tattgatgga catttttata 99600  
gttaaggata ataagtatcc caaagtcgat aacgacgata acgaagtatt tatactttta 99660  
ggaaatcaca atgactttat cagattaaaa ttaacaaaat taaaggagca tgtatttttt 99720  
tctgaatata ttgtgactcc agatacatat ggatctttat gcgtcgaatt aaatgggtct 99780  
agttttcagc acggcggtag atatatagag gtggaggaat ttatagatgc tggaaagaaa 99840  
gttagatggt gttctacatc caatcatata tctaagata taccogaaga tatgcacact 99900  
gataaatttg tcatttatga tatatacact tttgacgctt tcaagaataa acgattggta 99960  
ttcgtacagg tacctccgct gttaggagat gatagtcatt tgactaacc gttattgtca 100020  
cgtattatc gtaattcagt agccagacaa atggtcaata atatgatctt taatcaagat 100080  
tcatttttaa aatatttatt agaacatctg attagaagcc actatagagt ttctaaacat 100140  
ataacaatag ttagatacaa ggataccgaa gaattaaatc taacgagaat atgttataat 100200  
agagataagt ttaaggcgtt tgtattcgcg tgggttaacg gcgtttcggg aaatgaaaag 100260  
gtactagata cgtataaaaa ggtatctaat ttgatataat gaattcagtg actgtatcac 100320  
acgcgccata tactattact tatcacgatg attgggaacc agtaatgagt caattggtag 100380  
agttttataa cgaagttagc agttggctgc tacgagacga gacgtcgcct attcctgata 100440  
agttctttat acagttgaaa caaccgctta gaaataaacg agtatgtgtg tgtggtatag 100500  
atccgtatcc gaaagatgga actggtgtac cgttcgaatc accaaatctt acaaaaaaat 100560  
caattaagga gatagcttca tctatatcta gattaaccgg agtaattgat tataaaggtt 100620  
ataaccttaa tataatagac ggggttatac cctggaatta ttacttaagt tgtaaattag 100680  
gagaaacaaa aagtcacgcg atttactggg ataaaaatct taagttactg ctgcagcata 100740  
taactaaaca cgttagtgtt ctttattgtt tgggtaaaac agattttctg aatatacggg 100800  
ccaagttaga atccccgta actaccatag tcggatatca tccagcggct agagaccgcc 100860  
aattcgagaa agatcgatca tttgaaatta tcaacgtttt actggaatta gacaacaag 100920

-continued

---

cacctataaa ttgggctcaa gggtttattt attaatgctt tagtgaaatt ttaacttgtg 100980  
ttctaaatgg atgcggctat tagaggaat gatgttatct ttgttcttaa gactataggt 101040  
gtcccgtcag cgtgcagaca aaatgaagat ccaagatttg tagaagcatt taaatgcgac 101100  
gagttagaaa gatataatga gaataatcca gaatgtacac tattcgaaaag tcttagggat 101160  
gaggaagcat actctatagt cagaattttc atggatgtag atttagacgc gtgtctagac 101220  
gaaatagatt atttaacggc cattcaagat tttattatcg aggtgtcaaa ctgtgtagct 101280  
agattcgcgt ttacagaatg cggtgccatt catgaaaatg taataaaatc catgagatct 101340  
aatttttcat tgactaagtc tacaaataga gataaaacaa gttttcatat tatcttttta 101400  
gatacgtata ccactatgga tacattgata gctatgaaac gaacactatt agaattaagt 101460  
agatcatctg aaaatccact aaccagatcg atagacactg ccgtatatag gagaaaaaca 101520  
actcttcggg ttgtaggtac taggaaaaat ccaaatgctg acactattca tgtaatgcaa 101580  
ccacctcatg ataatataga agattacctt ttcacttacg tggatatgaa caacaatagt 101640  
tattactttt ctctacaaca acgattggag gatttagttc ctgataagtt atgggaacca 101700  
gggtttattt cattcgaaga cgctataaaa agagtttcaa aaatattcat taattctata 101760  
ataaacttta atgatctoga tgaataaat tttacaacgg taccactggg catagattac 101820  
gtaacacctt gtgcattatg taaaaaacga tcgcataaac atccgcatca actatcgttg 101880  
gaaaatggg ctattagaat ttacaaaact ggtaatccac atagtgtgaa agttaaatt 101940  
gttccggttg atggaataaa actgtttaat attgcacaaa gaattttaga cactaactct 102000  
gttttattaa ccgaacgagg agaccatata gtttgatta ataattcatg gaaatttaac 102060  
agcgaagaac ccttgataac aaaactaatt ttgtcaataa gacatcaact acctaaggaa 102120  
tattcaagcg aattactctg tccgagggaa cgaaagactg tagaagctaa catacgagac 102180  
atgttagtag attcagtgga gaccgatacc tatccggata aacttccgtt taaaaatggt 102240  
gtattggacc tggtagacgg aatgttttac tctggagatg atgctaaaa atatacgtgt 102300  
actgtatcaa ccgatttaa atttgacgat acaaagttcg tcgaagacag tccagaaatg 102360  
gaagagttaa tgaatatcat taacgatatc caaccattaa cggatgaaaa taagaaaaat 102420  
agagagctat atgaaaaaac attatctagt tgtttatgtg gtgctaccaa aggatgttta 102480  
acattctttt ttgagaaac tgcaactgga aagtcgacaa ccaaactgtt gttaaagtct 102540  
gctatcggg acctgtttgt tgagacgggt caaacaattt taacagatgt attggataaa 102600  
ggacctaact catttatcgc taacatgcat ttgaaaagat ctgtattctg tagcgaacta 102660  
cctgattttg cctgtagtgg atcaaaagaaa attagatctg acaatattaa aaagttgaca 102720  
gaacctgtg tcattggaag accgtgtttc tccaataaaa ttaataatag aaacctgagc 102780  
acaatcatta tcgatactaa ttacaaacct gtttttgata ggatagataa cgcattaatg 102840  
agaagaattg ccgtcgtgag attcagaaca cacttttctc aaccttctgg tagagaggct 102900  
gctgaaaata atgacgcgta cgataaagtc aaactattag acgaggggtt agatggtaaa 102960  
atacaaaata atagatatag attcgcattt ctatactgtg tggtgaaatg gtacagaaaa 103020  
tatcatgttc ctattatgaa actatacctt acacccgaag agattcctga ctttgcattc 103080  
tatctcaaaa taggtactct gttagatctt agctctgtaa agcatattcc attaatgacg 103140  
gacctctcca aaaagggata tatattgtac gataatgtgg ttactcttcc gttgactact 103200  
ttccaacaga aaatatccaa gtattttaat tctagactat ttggacacga tatagagagc 103260

-continued

---

ttcatcaata gacataagaa atttgccaat gttagtgatg aatatctgca atatatattc 103320  
atagaggata tttcatctcc gtaaatatat gctcatatat ttatagaaga tatcacatat 103380  
ctaaatgaat accggaatca tagatttatt tgataatcat gttgatagta taccaactat 103440  
attacctcat cagttagcta ctctagatta tctagttaga actatcatag atgagaacag 103500  
aagcgtgta ttgtccata ttaagggatc aggtaaaaca ataatcgctt tgttgttcgc 103560  
cttgtagct tccagattta aaaaggttta cattctagtg ccgaacatca acatcttaa 103620  
aattttcaat tataatatgg gtgtagctat gaacttgttt aatgacgaat tcatagctga 103680  
gaatatcttt attcattoca caacaagttt ttattctctt aattataacg ataacgtcat 103740  
taattataac ggattatctc gctacaataa ctctattttt atcgttgatg aggcacataa 103800  
tatctttggg aataaactg gagaacttat gaccgtgata aaaaataaaa acaagattcc 103860  
tttttacta ttgtctggat ctcccattac taacacacct aatactctgg gtcattat 103920  
agatttaatg tccgaagaga cgatagattt tggtgaaatt attagtcgtg gtaagaaagt 103980  
aattcagaca cttcttaacg aacgcgggtg gaatgtactt aaggatttgc ttaaaggaag 104040  
aatatcatat tacgaaatgc ctgataaaga tctaccaacg ataagatc acggacgtaa 104100  
gtttctagat actagagtag tatattgtca catgtctaaa cttcaagaga gagattatat 104160  
gattactaga cgacagctat gttatcatga aatgtttgat aaaaatgtg ataacgtgtc 104220  
aatggcagta ttgggacaac ttaactgat gaataattta gatactttat ttcaggaaca 104280  
ggataaggaa ttgtacccaa atctgaaaat aaataatggc gtgttatacg gagaagaatt 104340  
ggtaacgta aacattagtt ccaaatttaa atactttatt aatcggatac agacactcaa 104400  
cggaaaacat tttatatact tttctaattc tacatatggc ggattggtaa ttaaataat 104460  
catgtcagat aatggatatt ctgaatataa tggttctcag ggaactaatc cacatatgat 104520  
aaacggcaaa ccaaaaacat ttgctatcgt tactagtaaa atgaaatcgt ctttagagga 104580  
tctattagat gtgtataatt ctctgaaaa cgatgatggg agtcaattga tgtttttgtt 104640  
ttcatcaaac attatgtcgg aatcctatac tctaaaagag gtaaggcata tttggtttat 104700  
gactatcca gatacttttt ctcaatacaa ccaaattctt ggacgatcta ttagaaaatt 104760  
ctcttacgcc gatattctg aaccagttaa tgtatatctt ttagccgccg tatattccga 104820  
tttcaatgac gaagtgacgt cattaaacga ttacacacag gatgaattga ttaatgtttt 104880  
accatttgac atcaaaaagc tgttgtatct aaaatttaag acgaaagaaa cgaatagaat 104940  
atactctatt cttcaagaga tgtctgaaac gtattctctt ccaccacatc catcaattgt 105000  
aaaagtttta ttgggagaat tggtcagaca atttttttat aataattctc gtattaagta 105060  
taacgatacc aagttactta aaatggttac atcagttata aaaaataaag aagacgctag 105120  
gaattacata gatgatattg taaacggta cttctttgta tcgaataaag tatttgataa 105180  
atctctttta tacaataacg aaaacgatat tattacagta ccgtttagac tttcctacga 105240  
accatttggt tggggagtta actttcgtaa agaataaac gtggtatctt ctccataaaa 105300  
ctgatgagat atataaagaa ataatgtcg agctttgtta ccaatggata cttttcogtt 105360  
acattggaac ctcatgagct gacgtagac ataaaaacta atattaggaa tgcogtatat 105420  
aagacgtatc tccatagaga aattagtggt aaaaaggcca agaaaataga aattcgtgaa 105480  
gacgtggaat tacctctcgg cgaatagtt aataattctg tagttataaa cgttccgtgt 105540  
gtaataacct acgctatta tcacgttggg gatatagtca gaggaacatt aaacatcgaa 105600  
gatgaatcaa atgtaactat tcaatgtgga gatttaactc gtaaaactaag tagagattcg 105660

-continued

---

gg tactgtat catttagoga ttcaaagtac tgcttttttc gaaatggtaa tgcgtatgac 105720  
aatggcagcg aagtcactgc cgttctaagt gaggctcaac aaggtatcga atctagtttt 105780  
gtttttctcg cgaatatcgt cgactcataa aaaagagaat agcggtaagt ataaacacga 105840  
atactatggc aataattgcg aatgttttat tctcttcgat atatttttga taatatgaaa 105900  
aacatgtctc tctcaaatcg gacaaccatc tcataaaata gttctcgcgc gctggagagg 105960  
tagttgctgc tcgtataatc tctccagaat aatatacttg cgtgtcgtcg ttcaatttat 106020  
acggatttct atagtctctc gttatataat gcggttttcc atcatgatta gacgacgaca 106080  
atagtgttct aaatttagat agttgatcag aatgaatgtt tattggcgtt ggaaaaatta 106140  
tccatacagc gtctgcagag tggttgatag ttgttcctag atatgtaaaa taatccaact 106200  
tactaggcag caaattgtct agataaaata ctgaatcaaa cgggtgcagac gtattggcgg 106260  
atctaatagga atccaattga ttaactatct tttgaaaata tacattttta tgatccaata 106320  
cttgtaagaa tatagaaata atgataagtc catcatcgtg tttttttgcc tcttcataag 106380  
aactatattt tttcttattc caatgaacaa gattaatctc tccagagtat ttgtacacat 106440  
ctatcaagtg attggatcca taatcgtctt cctttcccca atatatatgt agtgatgata 106500  
acacatatc attggggaga aaccctccac ttatatatcc tcctttaaaa ttaatcctta 106560  
ctagttttcc agtgttctgg atagtgggtg gtttcgactc attataatgt atgtctaacy 106620  
gcttcaatcg cgcgtagaa attgcttttt tagtttctat attaatagga gatagttgtt 106680  
gcggcatagt aaaaatgaaa tgataactgt ttaaaaatag ctcttagtat gggaattaca 106740  
atggatgagg aagtgatatt tgaactcct agagaattaa tatctattaa acgaataaaa 106800  
gatattccaa gatcaaaaga cacgcattgt tttgctcgt gtataacaag tgacggatat 106860  
cgttaatag gagctagaag aacttcattc gcgttccagg cgatattatc tcaacaaaat 106920  
tcagattcta tcttagagt atccactaaa ctattacggt ttatgtacta caatgaacta 106980  
agagaaatct ttagacggtt gagaaaagg tctatcaaca atatogatcc tcactttgaa 107040  
gagttaatat tattgggtgg taaactagat aaaaaggaat ctattaaaga ttgtttaaga 107100  
agagaattaa aagaggaaag tgatgaacgt ataacagtaa aagaatttgg aatgtaatt 107160  
ctaaaactta caacacggga taaattattt aataaagtat atataagtta ttgcatggcg 107220  
tgttttatta atcaatcgtt ggaggattta tcgcatacta gtatttcaa tgtagaaatt 107280  
agaaagatta aatcattaaa tgattgtatt aacgaogata aatacgaata tctgtcttat 107340  
attataata tgctagttaa tagtaaatga acttttacag atctagtata attagtcaga 107400  
ttattaagta taatagacga ctagctaatg ctattatttg cgaggatgac tctcaaatta 107460  
ttacactcac ggcattcgtt aaccaatgcc tatggtgtca taaacgagta tccgtgtccg 107520  
ctattttatt aactactgat acaaaaatat tagtatgtaa cagacgagat agttttctct 107580  
attctgaaat aattagaact agaaacatgt ttagaaagaa acgattattt ctgaattatt 107640  
ccaattattt gaacaaacag gaaagaagta tactatcgtc attttttct ctagatccag 107700  
ctactactga taatgataga atagacgcta tttatccggg tggcataccc aaaaggggtg 107760  
agaatgttcc agagtgttta tccagggaaa ttaaagaaga agttaatata gacaattctt 107820  
ttgtatcoat agacactcgg ttttttattc atggcatcat agaagatacc attattaata 107880  
aattttttga ggtaactctc tttgtcggaa gaatatctct aacgagtgat caaatcattg 107940  
atacattdaa aagtaatcoat gaaatcaagg atctaattt tttagatccg aattcaggta 108000

-continued

---

atggactcca atacgaaatt gcaaaatg ctctagatg tgcaaaactt aaatggttacg 108060  
gccatagagg atggtattac gaatcattaa aaaaattaac tgaggatgat tgattagaaa 108120  
atataaatta atttaccatc gtgtatTTTT ataacgggat tgtccggcat atcatgtaga 108180  
tagttaccgt ctacatcgta tactcgacca tctacgcctt taaatcctct atttattgac 108240  
attaatctat tagaattgga ataccaata ttagtaccct caattagttt attggtaata 108300  
TTTTTTTT aggatagatc gatggctctt gaaaccaagg ttttccaacc ggactcattg 108360  
tcgatcggtg agaagtcttt ttcattagca tgaatccatt ctaatgatgt atgtttaaac 108420  
actctaaaca attggacaaa tctttttgat ttgctttgaa tgatttcaaa taggtcttcg 108480  
tctacagtag gcataccatt agataatcta gccattataa agtgcacgtt tacatatcta 108540  
cgttctggag gagtaagaac gtgactattg agacgaatgg ctcttcctac tatctgacga 108600  
agagacgcct cgttccatgt catatctaaa atgaagatat cattaatga gaaaaacta 108660  
ataccctcgc ctccactaga agagaatagc catgttttaa tgcattctcc gttagtgttt 108720  
gattcttggg taaactcagc caccgccttg attctagtat cttttgttct agatgagaac 108780  
tctatattag agataccaaa gactttgaaa tatagtaata agatttctat tcctgactga 108840  
ttaacaaatg gttcaaagac tagacattta ccatgggatg ctaaatctcc caaacatata 108900  
tctataaatt tgacgctttt ctcttttaat tcagtaata gagagatgc agccgcacta 108960  
gcatccctt tcaatagtct tcccttttta aaggtatcta atgctggattt agaaaactct 109020  
ctatctctta atgaattttt aaaatcatta tatagtgttg ctatctcttg cgcgtattcg 109080  
cccggatcac gattttgtct ttcaggaaag ctatcgaacg taaacgtagt agccatcagt 109140  
ctcagaatcc taaatgatga tatacctgtt tttatttcag cgagttagc cttttgataa 109200  
atctctctt gctttttoga catattaacg tatcgcatta atactgtttt cttagcgaat 109260  
gatgcagacc cttctacgtc atcaaaaata gaaaactcgt tattaactat atacgaacat 109320  
agtctccta gtttgagac taattctttt tcatcgacta gacgtttatt ctcaaatagc 109380  
gattgggtgt gtaaggatcc tggctgtagt aagttaacca acatgggtgaa ttcttgacaca 109440  
ctattgacga taggtgtagc cgataaaca atcatcttat ggttttttaa cgcgatggtc 109500  
ttagataaaa aattatatac tgaacgagta ggacggatct taccatcttc tttgattaat 109560  
gatttagaaa tgaagttagt acattcatca ataatgacgc atattctact cttggaatta 109620  
atagttttga tattagtaaa aaatttattt ctaaaattt gatcatcgta attaataaaa 109680  
atacaatcct tcgttatctc tggagcgtat ctgagtatag tgttcaccca aggatcttct 109740  
atcaaagcct tttcaccocaa taagataata gcccaatttg tataaatatc cttaagatgt 109800  
ttgagaatat atacagtagt cattgtttta ccgacaccocg tttcatggaa caataaaaga 109860  
gaatgcatac tgtctaacc taagaaaact cttgctacaa aatgttgata atccttgagg 109920  
cgtactacgt ccgaccccat catttcaacg ggcatttag tagttctgcg caatgcataa 109980  
tcgatatagg ccgctgtgta tttactcatt tatgagtgat aagtaataac tatgttttaa 110040  
aaatcacagc agtagtttaa ctagtctct ctgatgtttg ttttcgatac tttttgaatc 110100  
agaagtcata ctagaataaa gcaacgagtg aacgtaatag agagcttcgt atactctatt 110160  
cgaaaactct aagaacttat taatgaatc cgtatccact ggattgttta aaatactaaa 110220  
ttgaacactg ttcacatcct tccaagaaga agacttagtg acggacttaa catgagacat 110280  
aaataaatcc aaattttttt tacaacatc actagccacc ataatggcgc tatctttcaa 110340  
ccagctatcg cttacgcatt ttagcagctc aacattttta aagagactac aatatattct 110400

-continued

---

catagtatcg attacacctc taccgaataa agttggaagt ttaataatac aatatttttc 110460  
gtttacaaaa tcaaataatg gtcgaaacac gtcgaaggtt aacatcttat aatcgcta 110520  
gtatagattg ttttcagtga gatgattatt agatttaata gcatctcggt cactgttgaa 110580  
cagtttattg cgtgcgctga ggtcggcaac tacggcgctc gctttagtac tectcccata 110640  
atactttaag ctattaatct ttaaaatttc atagacttta tctagatcgc tttctggtaa 110700  
catgatatca tgtgtaaaaa gttttaacat gtcggtcggc attctattta gatcattaac 110760  
tctagaaaac tgaagaaagt aattagctcc gtattccaga ctaggtaatg ggcttttacc 110820  
tagagacaga ttaagttctg gcaatgtttc ataaaatgga agaaggacat gcgttccctc 110880  
ccgatattt tttacaattt catccattta caactctata gtttggtttc attattatta 110940  
gttattatct cccataatct tggaataact tacccttga tcgtaagata ccttatacag 111000  
gtcattacat acaactacca attgtttttg tacataatag attggatggt tgacatccat 111060  
ggtggaataa actactcgaa cagatagttt atctttcccc ctagatacat tagccgta 111120  
agttgtcggc ctaagaata tctttgggtt aaagttaaaa gttagggttc ttgttccatt 111180  
attgcttttt gtcagtagtt cattataaat tctcgagatg ggtccgttct ctgaatatag 111240  
aacatcattt ccaaatctaa cttctagtct agaaataata tcggtcttat tcttaaaatc 111300  
tattcccttg atgaagggat cgtaaatgaa caaatccttg gcctttgatt cggctgatct 111360  
attatctcog ttatagacgt tacggtgact agtccaaaga cttacaggaa tagatgtatc 111420  
gatgatggtg atactatggt atagtggac aaagattggt ctcttagtgg catcaactata 111480  
tgttccagta atggcggaaa actttttaga aatgttatat ataaaagaat tttttcgtgt 111540  
tccaaacatt agcagattag tatgaagata aacactcata ttatcaggaa cattatcaat 111600  
ttttacatac acatcagcat cttgaataga aacgatacca tctctcggaa cctctacgat 111660  
ctcggcagac tccggataac cagtcgggtg accatcgcta acaataacta gatcatocaa 111720  
caatctactc acatatgoat ctatataatc tttttcatct tggtagtacc ctggatcga 111780  
aataaattta ttatccgtat ttccataata aggttttagta taaacagaga gagatgttgc 111840  
cgcatgaact tcagttacag tcgcccgttg ttggtttatt tgacctatta ctctcctagg 111900  
tttctctata aacgatggtt taatttgtae attcttaacc atatatccaa taaagctcaa 111960  
ttcaggaaca taaacaaatt ctttgttgaa cgtttcaaag tcgaacgaag agtcaagaa 112020  
aacgatatcg gatactggat tgaaggttac cgttacggta atttttgaat cggatagttt 112080  
aagactgctg aatgtatctt ccacatcaaa cggagtttta atataaacgt atactgtaga 112140  
tggttcttta atagtgtcat taggagttag gccaatagaa atatcattaa gttcactaga 112200  
atatacagag tgtttcaaag caattgtatt attgatacaa ttattatata attcttcgcc 112260  
ctcaatttcc caaataacac cgttacacga agagatagat acgtgattaa tacatttata 112320  
tccaacatat ggtacgtaac cgaatcttcc cataccttta acttctggaa gttccaaact 112380  
cagaacaaaa tgattaagcg cagtaatata ctgatcccta atttogaagc tagcgatagc 112440  
ctgattgtct ggaccatcgt ttgtcataac tccggataga gaaatatatt gcggcatata 112500  
taaagtggga atttgactat cgaactcggaa gacattagac cgtttaatag agtcatcccc 112560  
accgatcaaa gaattaatga tagtattatt cattttctat ttaaaatgga aaaagcttac 112620  
aataaactcc gtagagaaat atctataaatt tgtgagtttt ccttaaagta acagcttccg 112680  
taaacgccgt ctttatctct tagtaggttt attgtattta tgaccttttc cttatcttca 112740

-continued

---

tagaatacta aaggcaacaa agaaatTTTT ggttcttctc taagagctac gtgagactta 112800  
accatagaag ccaacgaatc cctacatatt ttagaacaga aataccctac ttcaccaccc 112860  
ttgtatgtct caatactaata aggtctaaaa accaaatctt gattacaaaa ccaacactta 112920  
tcaattacac tatttgtctt aatagacaca tctgccatag atttataata ctttggtagt 112980  
atacaagcga gtgcttcttc tttagcgggc ttaaagactg ctttaggtgc tgaataaacc 113040  
acatctggaa ggcttactcg cttagccatt taattacgga actatTTTT tatacttcta 113100  
atgagcaagt agaaaacctc tcactacaa aaacgtactc gtgtccataa tcctctacca 113160  
tagtaacacg ttttttagat ctcatatgtg ctaaaaagt ttcccatact aattggttac 113220  
tattatTTTT cgtataatTT ttaacagttt gaggttttag atttttagtt acagaagtga 113280  
tatcgaatat tttatccaaa aagaatgaat aattaattgt cttagaagga gtgttttctt 113340  
ggcaaaagaa taccaagtgc ttaaatatTT ctactacttc attaatcttt tctgtactca 113400  
gattcagttt ctcacttttt acttgattga ttatttcaaa gactaactta taatcctttt 113460  
tatttattct ctcgttagcc ttaagaaac tagatacaaa atttgcactc acatcatccg 113520  
tggatatttg atttttttcc atgatatcca agagttccga gataatttct ccagaacatt 113580  
gatgagacaa taatctccgc aatacatttc tcaaatgaat aagtttatta gacacgtgga 113640  
agtttgactt tttttgtacc tttgtacatt tttgaaatac cgactcgcaa aaaatacaat 113700  
attcatatcc ttgttcagat actataccgt tgtgtctaca accgctacat aatcgtagat 113760  
tcatgttaac actctacgta tctcgtcgtc caatatttta tataaaaaa ttttatttct 113820  
agacgttgcc agaaaatcct gtaatatTTT tagttttttg ggctgtgaat aaagtatcgc 113880  
cctaatatgg ttaccgtctt ccgccaatat agtagttaa ttatccgcac atgcagaaga 113940  
acaccgctta ggcggtattca gtacaatgtt atatttttcc taccactca tttaaatc 114000  
ataatctaaa atagttctgt aatatgtcta gcgctaata attgatcata atcctgtgca 114060  
taaattaaga tacaacaatg tctcgaaatc atcgacatgg cttcttccat agttagaaga 114120  
tcgtcgtcaa agtttagcaac gtgattcacc aacatttgtt gttttgagc agcaataact 114180  
gaaccgtcgc cattcaacca ttcataaaaa ccactcgtctg aatccattga taatttcttg 114240  
tactggtttt tgagagctcg catcaatcta gcatttctag ctcccgatt gaaaacagaa 114300  
agaggatcgt acatccaggg tccattttct gtaaatagaa tcgtataatg tcccttcaag 114360  
aagatatcag acgatccaca atcaagaat tggctcctga gtttgaaca aacagcggac 114420  
tttaacctat acatgatacc gtttagcata atttctggtg atacgtcaat cggagtatca 114480  
tctattagag atctaaagcc ggtgtaacat tctccaccaa acatattctt attctgacgt 114540  
cgttctacat aaaacatcat tgcctcatta acgataacag gggaatgaac agcactacc 114600  
atcacattag ttcccaatgg atcaatgtgt gtaactccag aacatcttcc atagcctatg 114660  
ttaggaggag cgaacaccac tcttccacta ttgccatcga atgcataga ataaatatcc 114720  
ttggaattga tagaaatcgg actgtcggat gttgtgatca tcttcatagg attaacaact 114780  
atgtatggtg ccgctgaag tttcatatcg taactgatgc cgtttatagg tctagccaca 114840  
gaaaccaacg taggtctaaa tccaactata gacaaaatag aagccaatat ctgttctca 114900  
tctgtcataa cttgagagca tccagtatga ataacttca ttagatgggg atctaccgca 114960  
tcactcctgt tacaataaaa aatccatt ctatgttca taattgcttt tctaatcatg 115020  
gtatgcatgt ttgctctctg aatctctgtg gaaattagat ctgatacacc tgtaatcact 115080  
atcggattat cctccgtaag acgattaacc aacaacatat aattataaga ctttactttt 115140

-continued

---

ctaaattcat aaagttgctg gattaggcta taggtgtctc catgtacata cgcgttctcg 115200  
agcgcaggaa gtttaatacc gaatagtgcc atcagaatag gatgaatata gtaattagtt 115260  
tctggttttc tataaataaa agacaaatct tgtgaactag acataticgtt aaaatgcatg 115320  
gattggaatc gtgtagtoga cagaagaata tgatgattag atggagagta tattttatct 115380  
aactctttga gttggtcacc gattctagga ctgactcgag aatgaataag tactaaagga 115440  
tgagtacatt tcacagaaac actagcattg ttcaatgtgc tctttacatg ggtaaggagt 115500  
tgaaatagct cgtttctatt tgttctgaca atatttagtt tattcataat gttaagcata 115560  
tcctgaatag taaagttaga tgtgtcatac ttgtagtag ttagatattt agcaattgca 115620  
ttcccatcat ttctcaatct cgtactccaa tcatgcttag atgctacttc atctatagaa 115680  
accatacaat cctttttgat aggctgttga gattgattat ttctgcacg tttaggtttg 115740  
gtacgttgat ttctagcccc tgcggatata aagtcacgt ctacaatttg ggacaatgaa 115800  
ttgcatacac tacaagacaa agatttatca gaagtgtgaa tatgatcttc atctactaaa 115860  
gaaagagttt gattagtata actagatttt agtctgctg tagatgttaa aaaaacatcg 115920  
ctattgacca cggcttccat tatttatatt cgtagttttt actcgaaagc gtgattttaa 115980  
tatccaatct tattactttt ggaatcgttc aaaacctttg actaattgta gaatttgatc 116040  
tattgcccata cgcgtatact ccttgcate atatacgttc gtcaccagat cgtttgttcc 116100  
ggcctgaagt tgggtcatat ctctttcaac attcgacatg agatccttaa gggccatatic 116160  
gtctagattt tgttgagatg ctgctcctgg atttggattt tgggtgtctg ttgtacatac 116220  
tgtaccacca gtagggttag gactacatac agtggccaca ataggagggt gaggagggtg 116280  
aacggttga gtagtacaag aaatacttcc atccgattgt tgtgtacatg tagttgttgg 116340  
taacgtctga gaaggttggg tagatggcgg tgcctcctc ttttgatctt tattaattt 116400  
agagataata tcctgaacag cattgctcgg cgtcaacgct ggaaggagtg aactcgcgg 116460  
cgcacagta tctgcagaca gccaatcaaa aagattagac atacagatg atgtattagt 116520  
ttgtgtcgt ggttttggg taggagcagt actactaggt agaagaatag gagccggtg 116580  
agctgttga accggctgtg gagttatag aatagttgg tgtagcgggt ggataggctg 116640  
tctgctggcg gccatcatat tatctctagc tagttgttct cgcaactgtc tttgataata 116700  
cgactcttga gactttagtc ctatttcaat cgttccatcc tttttcgtat ccggatcctt 116760  
ttcttcagaa taatagattg acgactttgg tgtagaggat tctgccagcc tctgtgagaa 116820  
cttgtaaaag aagtcattt aaggcttaa aattgaattg cgattataag attaaatggc 116880  
agacacagac gatattatcg actatgaatc cgatgatctc accgaatagc aggatgatga 116940  
agaagaggaa gaagatggag agtcaactaga aactagtgat atagatccca aatcttctta 117000  
taagattgta gaatcagcat ccactcatat agaagatgag cattccaatc ttaaacatat 117060  
agggaaatcat atatctgtctc ttaaacgacg ctatactaga cgtataagtc tatttgaaat 117120  
agcgggtata atagcagaaa gctataactt gcttcaacga ggaagattac ctctagtttc 117180  
agaattttct gacgaaaoga tgaagcaaaa tatgctacat gtaattatac aagagataga 117240  
ggagggttct tgtcctatag tcactgaaaa gaacggagaa ttgttgcgg taaacgattt 117300  
tgacaaagat ggtctaaaat tccatctaga ctatattatc aaaatttgg aacttcaaaa 117360  
acgatattag aatttatacg aatctgttc tctaactgtc acaatcaagt ctgcgatgtt 117420  
cagcaattta ttgtcgtact ttatatcgtg ttcattaacg atatcttgca aaatagtaat 117480

-continued

---

gattctatct tccttcgata gatattcttc agagattatt gtcttatatt ctttcttggt 117540  
atcagatatg aatttgataa gactttgaac attattgata cccgtctggt taattttttc 117600  
tacagatatt ttagttttgg cagattctat cgtatctgtc aatagacatc caacatcgac 117660  
attcgacgtc aattgtctat aaatcaacgt ataaatttta gaaataacat tagcgaattg 117720  
ttgtgcggtg atgctgttat tttgaaacag tatgatttta ggtagcattt tcttaacaaa 117780  
gagaacgtat ttattgttac tcagttgaac agatgatata tccagattac taacgcacatc 117840  
gattccgtat accaaacttt cagaagaaat ggtatacaat tgtttgattt cattcaatgt 117900  
ctctttttca gaaattagtt tagagtcgaa tactgcaata attttcaaga gatagttttc 117960  
atcagataag attttattta gtgtagatat gataaaaacta ttgttttggt ggagaacttg 118020  
atacgccgog ttctctgtag tcgacgctct caaatgggaa acaatctcca ttattttttt 118080  
ggaatcggat acaatatctt cggtatcttg acgcagctca gtatacatag agttaagaga 118140  
gattagagtt tgtacattaa gcaacatgtc tctaaatgtg gctacaaact tttccttttt 118200  
cacatcatct agtttattat ataccgattt cacaacggca ccagatttaa ggaaccagaa 118260  
tgaaaaactc tgataactac aatatttcat catagttacg attttatcat cttctatagt 118320  
tggtgtaata gcgcatacct ttttctccaa gactggaacc aacgtcataa aaatgtttaa 118380  
atcaaaatcc atatcaacat ctgatgcgct aagaccagtc tcgctgtcaa gattatcttt 118440  
actaatggtg acgaaactcat cgtatagaac tctaagtttg tccattattt atttacagat 118500  
ttagtgtttt aatttatttg tgccttcca gagttgggat agtatttttc taacgtcggg 118560  
attatattat taggatctac gttcatatgt atcataatat taatcatcca cgttttgata 118620  
aatctatctt tagcttctga aataacgtat ttaaacaag gagaaaaata tttagctacg 118680  
gcatcagaog caataacatt ttttgtaaat gtaacgtatt tagacgacag atctctggtta 118740  
aaaagttttc catctatgta gaatccatcg gttgttaaca ccattcccgc gtcagattga 118800  
ataggagttt gaatagtttg ttttgaaat agatccttca ataacttata gttgggtggg 118860  
aaaaaatcga ttttatcact agactcttcc ttttttacta tcattacctc atgaactatt 118920  
tcttgaatga gtatatgtat tttcttccct atacggacg cgttcattgg aaaatatacc 118980  
atgtcgttaa ctataagaat atttttatcc tcgtttaca actgaataat atcagatgta 119040  
gttcgtaaac gaactatata atcaccagca caacatctaa ctatatgata tccactagtt 119100  
tcctttagtc gtttattatc ttgttccata ttagcagtca ttccatcatt taagaaggcg 119160  
tcaaagataa tagggagaaa tgacattttg gattctgtta cgactttacc aaaattaagg 119220  
atatacggac ttactatctt tttctcaacg tcgatttgat gaacacacga tgaaaatgtg 119280  
cttctatgag attgatcatg tagaaaacaa caagggatc aatatttccg catatcatga 119340  
aatatattaa gaaatcccac cttattatat ttccccaaag gatccatgca cgtaaacatt 119400  
atgccgttat cattaataaa gacttcttcc tcatcggatc tgtaaaagtt gttactgatt 119460  
tttttcattc caggatctag ataattaata atgatgggtt ttctattctt attctttgta 119520  
ttttggcata tcctagacca gtaaacagtt tccactttgg taaaatcagc agacttttga 119580  
acgctattaa acatggcatt aatggcaata actaaaaatg taaaatattt ttctatgta 119640  
ggaatatggt ttttcacttt aatagatata tgggttttgg ccaaaatgat agatattttt 119700  
ttatccgagg atagtaaaat attattagtc gccgtctcta taaaaatgaa gctagtctcg 119760  
atatccaatt ttattctaga attgatagga gtcgccaat gtaccttata cgttatatct 119820  
cccttgatgc gttccatttg tgtatctata tcggacacaa gatctgtaaa tagtttttacg 119880

-continued

---

ttattaatca tcacggatc gccgtcgta gataacgcta atgtaccatc caagtccca 119940  
atggagagat ttaactgttc atcgtttaga ataaaatgat taccggatc attaataaag 120000  
tgttcatcgt atctagataa caacgactta taattaatgt ccaagtcttg aactcgtga 120060  
atgatctttt ttaacccagt tagttttaga ttggtacgaa atatattgtt aaactttgat 120120  
tctacagtaa tgtccaaatc tagttgtgga aatacttcca tcaacattgt ttcaaaactg 120180  
ataatattat tatctacatc ttcgtaacgat ccaaattccg gaatagatgt atcgcacgct 120240  
ctggccaccc agataaccaa aaagtcacac gctccaggat atacattgta taaaagcta 120300  
tcgtttttta gtagggtttt tttctcgctg tatacgaagg gattaaaaat agtattatca 120360  
acgtaactat attccaaatt attccttatga gaatagataa taatatcgct cttaatatct 120420  
aacaaatttc ctaaatatcc cttaattga gtcattcgaa gcgtcaatag aatatgtctc 120480  
ttaactattt ccggctgttg tatatttaa tgacttcgta aaaaataata tatggcgac 120540  
ttctcatcta tgtaatcata tggagtgaga tatagggctc gttctactc ctgccctta 120600  
cccactgta ataccaattg cggacttact atatatcgca tatttatatc gtggggtaaa 120660  
gtgaaaatct actaccgatg atgtaagtct tacaatgttc gaaccagtac cagatctta 120720  
tttgagggcc tccgtagaac taggggaggt aaatatagat caaacaacac ctatgataa 120780  
ggagaatagc ggttttatat ccgcagtag acgtctatc gcccatagat ctaaggatga 120840  
tgagagaaaa ctagcactac gattcttttt acaaagactt tatttttttag atcatagaga 120900  
gattcattat ttgttcagat gcgttgacgc tgtaaaagac gtcactatta ccaaaaaaa 120960  
taacattata gtggcgctt atatagcact tttaactatc gcatcaaaag gatgcaaact 121020  
tacagaaaca atgattgaag cattctttcc agaactatat aatgaacata gtaagaaatt 121080  
taaattcaac tctcaagtat ccatcatcca agaaaaactc ggataccagt ttggaaacta 121140  
tcacgtttat gattttgaac cgtattactc tacagtagct ctggctatc gagatgaaca 121200  
ttcatctggc atttttaata tccgtcaaga gagttatctg gtaagttcat tatctgaaat 121260  
aacatataga ttttatctaa ttaactaaa atctgatctt gttcaatgga gtgctagtac 121320  
ggcgctgta attaatacaa tggtaaacat tgtattgatt acagtgtatg aaaagttaca 121380  
actggtcata gaaaatgatt cacaatttac atgttcattg gctgtggaat caaaacttcc 121440  
aataaaatta cttaagata gaaatgaatt atttacaaa ttcattaacg agttaaaaa 121500  
gaccagttca ttcaagataa gcaaacgca taaggatagc ctattaaaat attttactta 121560  
ggactggagt tagaatttat agacgactca tttcgtttat cattgttact accatcatta 121620  
ttagtattct tcttgcac tttgtcagaa atatacagca atgctatacc taatactaaa 121680  
tacattatca tgetcgcaat ggtctcaaca acaacgaacc aaaatgaatt tggctgtagc 121740  
ttttgttcac aaaaatacat aaagaaatgt ctacataaat ctatggcgcc attggctact 121800  
tgaaatagcg ccagtcctcc tacagatttt aatatagctg tataacatga catttattca 121860  
tcatcaaaag agacagagtc accatctgtc atatttagat ttttttcat gtgttcaaag 121920  
tatcctctac tcatttcatt ataatagttt atcactacta gaatttttagg acggatcaat 121980  
gagtaagact tgactagatc gtcagtagta atttgtgcat cgtctattct gcatccgctt 122040  
cgtcgaataa tgtatagcat cgctttgaga ttctccatag ctatcaagtc tttatacaat 122100  
gacatgaaa tatctgtgaa tactttatac ttctccaaca tcgatgcctt aacatcatcg 122160  
cctactttag cattgaaaat acgttctatt gtgtagatgg atgtagcaag atttttaaac 122220

-continued

---

aacaatgcc tcttacacga tgattgctc aagtctccaa tcgtttgttt agaacgatta 122280  
gctacagagt ccaatgcttg gctgactagc atattattat ctttagaagt tgtattcttc 122340  
aatgaggcgt ttatcatatc tgtgatttcg ttagtcatat tacagtctga ctgggttgta 122400  
atggtatcca acatatcacc tatggatacg gtacacgtac cagcatttgt aataatccta 122460  
tctaagatgt tgtatggcat tgcgcagaaa atatcttctc ctgtaatatc tccactctcg 122520  
ataaatctac tcagattatt cttaaatgcc ttattctctg gagaaaagat atcagtgtcc 122580  
atcatttcat taatagtata cgcagaaaag ataccacgag tatcaattct atccaagata 122640  
cttatcggtt ccgagtcaca gataatgggt tctctctcct cgggagatcc tgcatagaaa 122700  
tatctaggac aatagtttct atactgtctg taactctgat aatctctaaa gtcactaact 122760  
gataccatga aattgagaag atcaaacgct gaagtaatta attttctgc ctcgtttcta 122820  
ctacaactag ttttcatcaa tgtagtgcag atgtattggt tagttacttt tggcttaata 122880  
ctgatgatag agatattatt acttcccata atggatcttc tagtagtca cttaaagccc 122940  
attgatgcga atagcagata gataaagtct tggtagtact cctttctaat atagtaggga 123000  
ctaccttgt caccacaact tatacccaca taagccataa caacctcttt aatagccgtt 123060  
tcatgagggt taccagccat gagcctgagt agttggaaga atctcatgaa tcccgtctca 123120  
gaaagtccta tatgcatgat agatttatct ttcctgggaa actctcgtat agtcatagat 123180  
gaaatactct tcaaaagttc tgaataaga ttagtaacag tcttacctcc gactactcta 123240  
ggtaacaaac aaactctaat agtggttttc tctgctggaga taatatacaga aaggatagag 123300  
caataagtag tattattgtg attataaaga ccgaatacat aacaggtaga attataaac 123360  
atcatgtcct gaagggtttt agacttgtat tctctgtaat ccataccgtc ccaaacatg 123420  
gatttggtaa ctttgatagc cgtagatctt tgttctctcg ccaacagggt aaagaaatta 123480  
ataaagaatt tgttgtttct atttatgtcc acaaatgca cgtttggaag cgccacggtt 123540  
acattcaactg cagcattttg aggatcgca gtatgaagta cgatggtatt gtttactggt 123600  
atatctggaa agaaatctac cagtctagga ataagagatt gatatcgcat agaaatagta 123660  
aagtttataa tctcatcatc gaagagcatt ttggtaccat tgtaataaat atccactctg 123720  
tcatatgtat aaatgaagta ctgttcaaac atgatgagat gtttatatgt tggcatagta 123780  
gtgagatcga cgtttggtaa tggcaatgta ttaagattaa ctccataatg tctagcagca 123840  
tctcgtatgt tataagcgtc gtcaaacggt ggtcgtatct gtattgttat atattgtcta 123900  
acacataaa gattatcaaa atcttctctg cttaatacac cgtaaacat ttttgccttg 123960  
aattctttta ttggtgcatt aataacatcc ttatagagga tggtaaaaaa ataagtgtta 124020  
tcaaaagtaa gatctggata tttctttctc gctagaacat ccattgagtc ggagccatct 124080  
ggtttaatat aaccaccgat aaatctagct ctgtattctg tatccgtcaa tctaataatta 124140  
agaagggtgt gagtgaagg tgaagatcgt taaaagctgt gagtattaat gataggatta 124200  
gtttccgaac taatgttaat tgggttatta ataatatcta tattccagc gtttaagtga 124260  
acattaaaca gtttaattc acgtgacgtg gtatcaatta aataattaat gcccaatttg 124320  
gatatagcag cctgaagctc atcttgttta gttacggatc ctaatgagtt attaagcaat 124380  
atategaacg gatgaacgaa ggttgtttta agttggctgc atactttgta atctagacat 124440  
agatgctgaa gaacggtaga aactatacga aataaatatt cagagtcctc taattgatca 124500  
agagtaacta ttgacttaat aggcattcatt tatttagtat taaatgacga ccgtaccagt 124560  
gacggatata caaacgatt taattacaga gttttcagaa gataattatc catctaaca 124620

-continued

---

aaattatgaa ataactcttc gtcaaatgtc tattctaact cacgttaaca acgtggtaga 124680  
tagagaacat aatgccgccg tagtgtcatc tccagaggaa ataccctcac aacttaataga 124740  
agatctatctt ccagatgatg attcaccggc cactattatc gaacgagtac aacctcatac 124800  
tactattatt gacaatactc cacctcctac gtttcgtaga gagttattaa tatcggaaca 124860  
acgtcaacaa cgagaaaaaa gatttaatat tacagtatcg aaaaatgctg aagcaataat 124920  
ggaatctaga tctatgataa cttctatgcc aacacaaaca ccatccttgg gagtagttta 124980  
tgataaagat aaaagaattc agatgttaga ggatgaagtg gttaatctta gaaatcaacg 125040  
atctaataca aatcatctg ataatttaga taattttacc aaaatactat ttggaagac 125100  
tccgtataaa tcaacagaag ttaataagcg tatagccatc gttaattatg caaatttgaa 125160  
cgggtctccc ttatcagtcg aggacttggg tgtttgttca gaggatgaaa tagatagaat 125220  
ctataaaaacg attaaacaat atcacgaaag tagaaaacga aaaattatcg tctaactcgt 125280  
gattattatt gtcataaaca ttatcgagca ggcattgcta aaactcggat ttgaagaat 125340  
caaaggactg agtaccgata tcacttcaga aattatcgat gtggagatcg gagatgactg 125400  
cgatgctgta gcatcaaac taggaatcgg taacagtcgg gttcttaata ttgtattgtt 125460  
tatactcaag atattctgta aacgaattaa aattatttaa ttaatacat tcccatatcc 125520  
agacaacaat cgtctggatt aatctgttcc tgctctctca taccggacga catattaatc 125580  
tttttattag tgggcatctt tttagatggt ttctttttcc cagcattaac tgattcgata 125640  
cctagaagat cgtgattgat ctctccgacc attccacgaa cttctaattg gccgtctctg 125700  
acggtaccat aaactatctt accagcatta gtaacagctt ggacaatctg accatccatc 125760  
gcattgtacg atgtagtagt aactgttgtt ctacgtctag gagcaccaga agtatttttg 125820  
gagcccttgg atgttgatgt agaagaagac gaggattttg attttggtt acatgtaata 125880  
cattttgaac tctttgattt tgtatccat gcgccggcag tcacatctgt ttgagaatta 125940  
agattattgt tgcctccttt gacggctgca tctccaccga tttgogctag tagattttta 126000  
agctgtggtg taatcttatt aactgtttcg atataatcat cgtaactgct tctaaccggct 126060  
aaattttttt tatccgcoat ttagaagcta aaaatatttt tatttatgca gaagatttaa 126120  
ctagattata caatgaaacta atatgatcct tttccagatt atttacaac ttggtatttt 126180  
ttggttctgg aggaggcgaa tttaaattcg gacttggatt cggattttgt aagttcttga 126240  
tcttattata catcgagtat aggatggcga cagtaactgc tacacaaata ccgatcaaaa 126300  
gaagaatacc aatcatttat tgacaataac ttcactattg atcaagtatg caatatatca 126360  
tcttttctact aaataagtag taataatgat tcaacaatgt cgagatatat ggacgataat 126420  
aatttagttc atggaaatat cgtatgatt ggtgtgaatg actccgctaa ctctgtgggg 126480  
tgccagtgcc tttcccaca tagaataaat tagcattccg actgtgataa taataccaag 126540  
tataaacgcc ataatactca atactttcca gtagcagtg ggactggtag acttactaaa 126600  
gtcaataaag gcgaagatc acgaaagaat caaagaatg attccagcga ttagcacgcc 126660  
ggaaaaataa tttccaatca taagcatcat gtccatttaa ctaataaaaa ttttaaatcg 126720  
ccgaatgaac aaagtgaat ataaccata taaaaacaat agtttgtact gcaaaaaata 126780  
tatctatttt tgttttcgaa gatatggtaa aattaaatg tagtacacag catgttataa 126840  
ctaacagcag caacggctcg taattactta tcatttacta gacgaaaagg tgggggata 126900  
ttttctgct caaataatac gaatatatca cccatccatt ttatgcatg tttatatact 126960

-continued

---

ctaatcttta atagatctat agacgacggg tttaccaaca atatagattt tatcgattca 127020  
 tctaatttaa acccttccctt aaacgtgaat gatctattat ctggcataac gatgacccta 127080  
 cctgatgaat cggacaatgt actgggccat gtagaataaa ttatcaacga attatcgtct 127140  
 acgaacattt atatcatttg ttttaatttt aggacgcgaa taaatggata taaaatagaa 127200  
 aataacagat attacaacca gtgttatggc cgcgcccaac caggtaggca gttttatttt 127260  
 atcttttact acaggttctc ctggatgtac gtcaccaacg gcggacgtag ttctagtaca 127320  
 attagacgta agttccgctt gggaaatttt taacgctaaa gagttaacgt taatcgtaca 127380  
 cccaacgtat ttacatctag ttctttgaac atcttgatta taatataacc attttctatc 127440  
 tctagattcg tcggtgcaact catgtaacca acatacccta ggctcctaaat atttatctcc 127500  
 ggaattagat tttggataat tcgcgcacca acaatttcta tttcctttat gatcgttaca 127560  
 aaagcgtat aatgccgtat ccccaaaaagt aaaataatca ggacgaataa ttctaataaa 127620  
 ctcagaacaa tatctcgcct ccatatggtt ggagcaaata tcggaataag tagacatagc 127680  
 cggtttccgt tttgcacgta accattctaa acaattgggg tttccaggat cgtttctaca 127740  
 aatccagtc atgaatcgt cacaatgttc tgtcttgtaa ttattattaa atatttttgg 127800  
 acagtgtttg gtatttctct tagaacaaca ttttgccacg ctatcactat cgccaggag 127860  
 ataatccttt tttataaaat gacatcgttg cccggatgct atataatcag tggcgtggtt 127920  
 taaatcctta atatattcag gagttacctc gttctgataa tagattaatg atccaggacg 127980  
 aaatttgaat gaactacatg gttctccatg aattaataca tattgtttag caaattcag 128040  
 aactataaaa ctactacaat gatctatcga cataccatct atcaacaaa acttgggttt 128100  
 aatttctccc ggagatggtt cataatagta cgtataactt tcttctgcaa acttaacagc 128160  
 tctattatat tcaggataat taaaacctaa ttccatatat ttgtctcgtat tatctgctat 128220  
 tcctgggtgct attttgattc tattaagagt aacagctgcc cccattctta ataactgca 128280  
 gtatttaaac tgttaaagt tggatatca acatctacct tatttcccgc agtataaggt 128340  
 ttgttgcaag tatactgttc aggaatggtt acatttatac ttcttctata gtctgtctt 128400  
 tcgatgttca tcacatagc aaagaacaga ataaacaaaa taatgtaaga aataatatta 128460  
 aatatctgtg aattcgtaaa tacattgatt gccataataa ttacagcagc tacaatacac 128520  
 acaatagaca ttcccacagt gttgccatta cctccacgat acatttgagt tactaagcaa 128580  
 taggtaataa ctaagctagt aagaggcaat agaaaagatg agataaatat catcaatata 128640  
 gagattagag gagggctata tagagccaag acgaacaaaa tcaaaccgag taacgttcta 128700  
 acatcattat ttttgaagat tcccaataa tcattcttc ctccataatc gttttgcac 128760  
 atacctccat ctttaggcat aaacgattgc tgctgttct ctgtaataa atctttatca 128820  
 agcactccag caccgcgaga gaagtcgtca agcatattgt aatatcttaa ataactcatt 128880  
 tataatattaa aaaatgtcac tattaagat ggagtataat ctttatgccg aactaaaaaa 128940  
 aatgacttgt ggtcaacccc taagtcttt taacgaagac ggggatttcg tagaagtga 129000  
 accgggatca tcctttaagt ttctgatacc taagggattt tacgcctctc cttccgtaaa 129060  
 gacgagtcta gtattcgaga cattaacaac gaccgataat aaaatcacta gtatcaatcc 129120  
 aacaaatgcg ccaaaagtat atcctcttca acgcaaagtc gtatctgaag tagtttctaa 129180  
 tatgagggaa atgatcgaat caaaacgtcc tctatacatt actcttcaact tggcgtgtgg 129240  
 atttggtaag actattacca cgtgttatct tatggctaca cacggtagaa aaaccgtcat 129300  
 ttgcgtaccc aataaaatgt taatacatca atggaagaca caggtagagg cagtcggatt 129360

-continued

---

ggaacataag atatccatag atggagtaag tagtctatta aaggaactaa agactcaaag 129420  
tccggatgta ttaatagtag tcagtagaca tctgacaaac gatgcctttt gtaaataat 129480  
caataagcat tatgatttgt tcatcttggga tgaatcacat acgtataatc tgatgaacaa 129540  
tacagcagtt acaagatttt tagcgtatta tctctcgatg atgtgttatt ttttaactgc 129600  
tacacctaga ccatctaacc gaatttattg taacagtatt attaataattg ccaagttatc 129660  
cgatctaaaa aaaactatct atgacggtaga tagttttttt gagccatatt ccacagacaa 129720  
tattagacat atgataaaac gattagatgg accatcfaat aaatatcata tatatactga 129780  
gaagttatta tctgtagacg agcctagaaa tcaacttatt cttaataccc tggtagaaga 129840  
attcaagtca ggaactatta atcgcatttt agttattact aaactacgtg aacatatggt 129900  
attcttctac aaacgattat tagatctttt cggaccagag gttgtattta taggagacgc 129960  
ccaaaataga cgtactccag atatggtcaa atcaatcaag gaactaaata gatttatatt 130020  
cgtatccacc ttatttttatt cgggtactgg tttagatatt cctagtttgg attcgttgtt 130080  
catttgctcg gcagtaatca acaatagca aatagagcaa ttactagga gggtagtctg 130140  
agaaacagaa ctattagata ggacgggata tgtatttctt aacacatcca tcaaagaaat 130200  
aaagtacatg ataggaaatt tcatgcaacg aattattagt ctgtctgtag ataaactag 130260  
attdaaacaa aaaagttatc ggaacatca agaatccgat cccacttctg tatgtacaac 130320  
atcctccaga gaagaacgtg tattaaatag aatatttaac tcgcaaaatc gttaagaagt 130380  
ttaagcgacg atccgcatgc tgcgcaggcc agtgtattac ccctcatagt attaatataa 130440  
tccaatgata cttttgtgat gtcggaaatc ttaaccaatt tagactgaca ggcagaacac 130500  
gtcatgcaat catcatcgtc atcgataact gtagtcttgg gcttcttttt gcggtctctc 130560  
attccggaac gcacattggt gctatccatt taggtagtaa aaaataagtc agaatatgcc 130620  
ctataaacag atcgtgcaaa acctgggata tctgtctctat ctttatcaca atatagtgt 130680  
tcgacatttt tattattatt gacctcgttt atcttggaac atggaatggg aacatttttg 130740  
ttatcaacgg ccacctttgc cttaattcca gatgttgtaa aattataact aaacagtcta 130800  
tcatcgacac aaatgaaatt cttgtttaga cgtttgtagt ttacgtatgc ggctcgttcg 130860  
cgtctcattt tttcagatat tgcaggactc ataattataa aaataagaat gaaataacat 130920  
aggattaaaa ataaagttat catgacttct agcgtctgatt taactaactt aaaagaatta 130980  
cttagtctgt acaaaagttt gagattttca gattctgcgg ctatagaaaa gtataattct 131040  
ttggtagaat ggggaacatc tacttactgg aaaataggcg tgcaaaagggt agctaatgtc 131100  
gagacgtcaa tatctgatta ttatgatgag gtaaaaaata aaccgtttaa tattgatccg 131160  
ggctattaca ttttcttacc ggtatatttt gggagcgtct ttattttatc gaagggtaaa 131220  
aatatggtag aacttgatc tggaaactct tttcaaatc cagatgatat gcgaagtgcg 131280  
tgtaacaaag tattagacag cgataacgga atagactttc tgagatttgt tttgttaaac 131340  
aatagatgga taatggaaga tgctatatca aaatatcagt ctccagttaa tatattttaa 131400  
ctagctagtg agtacggatt aaacataacc aaatatttag aaattgaaat agaggaagac 131460  
acattatttg acgacgagtt atactctatt atagaacgct cttttgatga taaatttcca 131520  
aaaaatcca tatcgtatat taagttggga gaacttagac ggcaagttgt agactttttc 131580  
aaattctcat tcatgtatat tgagtcctac aaggtagatc gtataggaga taatattttt 131640  
attcctagcg ttataacaaa atcaggaaaa aagatattag taaaagatgt agaccattta 131700

-continued

---

atagatccta aggttagaga acatacattt gtaaaagtaa aaaagaaaa cacattttcc 131760  
atattatacg actatgatgg gaacggaaca gaaactagag gagaagtaat aaaacgaatt 131820  
atagacacta taggacgaga ctattatggt aacggaaagt atttctctaa ggttggtagt 131880  
gcaggcttaa agcaattgac taataaatta gatattaatg agtgcgcaac tgtcgatgag 131940  
ttagttgatg agattaataa atccggaact gtaaaacgaa aaataaaaa ccaatcagca 132000  
tttgatttaa gcagagaatg tttgggatat ccagaagcgg attttataac gttagttaat 132060  
aacatgcggt tcaaaataga aaattgtaag gttgtaaat tcaatattga aaataactaat 132120  
tgtttaaata acccgagtat tgaactata tatggaaact ttaaccagtt cgtctcaatc 132180  
tttaatgctg tcaccgatgt caaaaaaga ttattcgagt gaaataatat gcgcctttga 132240  
tataggtgca aaaaatcctg ccagaactgt tttagaagtc aaggataact ccgttagggt 132300  
attgatata tcaaaatag actggagttc tgattgggaa aggcgcatag ctaaagattt 132360  
gtcacaatat gaatacacta cagttcttct agaacgtcag cctagaaggt cgcgctatgt 132420  
taaatttatc tattttatta aaggcttttt atatcataca tcggtgcca aagttatttg 132480  
cgtctcgct gtcattctct gtaattcata tagagatcga aaaagagat cggtcgaagc 132540  
atctcttgat tggatggaca cattcggatt gcgagactcc gttccggata gacgcaaatt 132600  
agacgatgta gcgtagtatt tcaatttggc tatgagatc gtattagata aatggaatac 132660  
taattataca ccttataata ggtgtaaatc tagaaattac ataaaaaaa tgtaataacg 132720  
ttagtaacgc cattatggat aatctattta cctttctaca tgaatataga gatagatatg 132780  
ccagaactat ttttaacttt catctaataa gttgcgatga aataggagat atatatggtc 132840  
ttatgaaaga acgcatttcc tcagaggata tgtttgataa tatagtgtat aataaagata 132900  
tacatcctgc cattaagaaa ctagtgtatt gcgacatcca acttactaaa cacattatta 132960  
atcagaatac gtatccgga ttaacgatt cttcacaagt gaaatgtgt cattatttctg 133020  
acataaactc agataatagc aatattagct ctcgtacagt agagatattt gagagggaaa 133080  
agtcatctct tgtatcatat attaaaaacta ccaataagaa gagaaaggtc aattacggcg 133140  
aaataaagaa aactgttcat ggaggcacta atgcaaatta cttttccggt aaaagtctg 133200  
acgagtatct gagtactaca gttagatcca acattaatca accttggatc aaaaccattt 133260  
ctaagagaat gagagtagat atcattaatc actctatagt aacgcgtgga aaaagctcta 133320  
tattacaac tatagaaatt attttacta atagaacatg tgtgaaata ttcaaggatt 133380  
ctactatgca cattattcta tccaaggaca aggatgaaaa ggggtgtata cacatgattg 133440  
acaaattatt ctatgtctat tataatttat ttctgttgtt cgaagatate atccaaaacg 133500  
agtactttaa agaagtagct aatggtgtaa accacgtact cacggctacg gcattagatg 133560  
agaaattatt cctaattaag aaaatggctg aacacgatgt ttatggagtt agcaatttca 133620  
aaatagggat gtttaacctg acatttatta agtcgttggg tcataccggt ttccctctc 133680  
tgttagatga ggatagcaaa ataaagtttt ttaaggggaa aaagctcaat attgtagcat 133740  
tacgatctct ggaggattgt ataaattacg tgactaaatc cgagaatag atagaaatga 133800  
tgaaggaaag atcgactatt ttaaatagca tagatataga aacggaatcg gtagatcgtc 133860  
taaaagaatt gcttctaaaa tgaaaaaaaaa cactgattca gaaatggatc aacgactcgg 133920  
atataagttt ttggtgctg atcctaagc cggagttttt tatagaccgt tacatttcca 133980  
atatgtatcg tattctaatt ttatattgca tcgattgcat gaaatctga ccgtcaagcg 134040  
gccactctta tcgtttaaga ataatacaga acgaattatg atagaaatta gcaatgttaa 134100

-continued

---

agtgactcct ccagattact cacctataat cgcgagtatt aaaggttaaga gttatgacgc 134160  
attagccaag ttcactgtaa atatctttaa agaggtaatg accaaagagg gtatatccat 134220  
cactaaaata agtagttatg agggaaaaga ttctcatttg ataaaaattc cgctactaat 134280  
aggatacggg aataaaaatc cacttgatac agccaagtat cttgttccta atgtcatagg 134340  
tggagtcttt atcaataaac aatctgtcga aaaagtagga attaacttag tagaaaagat 134400  
tacaacatgg ccaaaattta gggttgttaa gccaaactca ttcactttct cgttttctc 134460  
cgtatcccct cctaatgtat taccgacaag atategccat tacaagatat ctctggatat 134520  
atcacaatg gaagcgtga atatatcacc gacaaagaca tttataacgg tcaatattgt 134580  
tttgctgtct caatatttat ctgagtgag tctagaattc attagacgta gtttatcata 134640  
cgatagcct ccagaagttg tctatctagt aaacgcgata atagatagtg ctaaacgaat 134700  
tactgaatct attactgact ttaatattga tacatacatt aatgacctgg tggaagctga 134760  
acacattaaa caaaaatctc agttaacgat taacgagttc aaatatgaaa tgctgcataa 134820  
ctttttacct catatgaact atacaccoga tcaactaaag ggattttata tgatatcttt 134880  
actaagaaag tttctctact gtatcttcca cacttctaga tatccagata gagattcgat 134940  
ggtttgcctat cgcacccata cgtacggcaa atattttgag acgttggcac atgatgaatt 135000  
agagaattac ataggcaaca tccgaaacga tatcatgaac aatcacaaga acagaggcac 135060  
ttacgcggta aacattcatg tactaacaac tcccggactt aatcatgcat tttctagtct 135120  
attgagtga aagttcaaaa agtcagacgg tagttatcga acacatctc actattcatg 135180  
gatgcagaat atttctatc ctaggagtgt tggattttat ccggatcaag taaagatttc 135240  
aaagatgtt tctgtcagaa aataccatcc aagtcaatat ctttactttt gttcatcaga 135300  
cgttccggaa agaggctcct aggtaggttt agtatctcaa ttgtctgtct tgagttccat 135360  
tacaatatata ctaacgtctg agtatttga tttggaaaag aaaatttgtg agtatatcag 135420  
atcatattat aaagatgata taagttactt tgaaacagga tttccaatca ctatagaaaa 135480  
tgctctagtc gcactctctta atccaaatat gatatgtgat tttgtaactg acttttagacg 135540  
tagaaaacgg atgggatttt tccgtaactt ggaggtaggt attacttttag ttagggatca 135600  
catgaatgaa attcgcatta atattggagc gggaaagatta gtcagaccat tcttggttgt 135660  
ggataacgga gagctcatga tggatgtgtg tccggagtta gaaagcagat tagacgacat 135720  
gacattctct gacattcaga aagagtttcc gcactgtcacc gaaatggtag atatagaaca 135780  
atttactttt agtaacgtat gtgaatcggc tcaaaaattt agaatgatgt caaaggatga 135840  
aagaaagcaa tacgatttat gtgactttcc tgccgaattt agagatggat atgtggcatc 135900  
ttcattagtg ggaatcaatc acaattctgg acccagagct attcttggat gtgctcaage 135960  
taaacaagct atctctgtgc tgagctcggg tatacgaat aaaatagaca atggaattca 136020  
tttgatgtat ccagagaggg caattgtcat tagtaaggct ttagaaaactt caaagattgc 136080  
ggctaattgc ttcggccaac atgttactat agcattaatg tcgtacaaaag gtatcaatca 136140  
agaggatgga attatcatca aaaaaaatt tattcagaga ggccgtctcg atatagttac 136200  
cgcaaaagaa catcaagtag aaattccatt ggaaaacttt aataacaaag aaagagatag 136260  
gtctaaccgc tattcaaat tagaaagtaa tggattagtt agactgaatg ctttcttga 136320  
atccggagac gctatagcac gaaatatctc atcaagaact cttgaagatg attttgctag 136380  
agataatcag attagcttcg atgtttccga gaaatatacc gatatgtaca aatctcgcgt 136440

-continued

---

tgaacgagta caagtagaac ttactgacaa agttaaggta cgagtattaa ccatgaaaga 136500  
aagaagaccc attctaggag acaaatttac cactagaacg agtcaaaagg gaacagtcgc 136560  
gtatgtcgcg gatgaaacgg aacttccata cgacgaaaat ggtatcacac cagatgtcat 136620  
tattaattct acatccatct tctctagaaa aactatatct atgttgatag aggttatttt 136680  
aacagccgca tattctgcta agccgtacaa caataagggg gaaaaccgac ctgtctgttt 136740  
tcctagtagt aacgaaacat ccategatac atatatgcaa ttcgctaaac aatgttatga 136800  
gcattcaaat ccgaaattgt ctgatgaaga attatcggat aaaatctttt gtgaaaagat 136860  
tctctatgat cctgaaacgg ataagcctta tgcacccaaa gtattttttg gaccaattta 136920  
ttacttgcgt ctgaggcatt taactcagga caaggcaacc gttagatgta gaggtaaaaa 136980  
gacgaagctc attagacagg cgaatgaggg acgaaaacgt ggaggaggta tcaagttcgg 137040  
agaaatggag agagactgtt taatagcgcg tgggtgcagcc aatactatta cagaagtttt 137100  
gaaagattcg gaagaagatt atcaagatgt gtatgtttgt gaaaattgtg gagacatagc 137160  
agcacaaatc aaaagtatta atacatgtct tagatgttca aaacttaatc tctctcctct 137220  
cttaacaaaa attgatacca cgcacgtatc taaagtattt cttactcaa tgaacgccag 137280  
aggcgtaaaa gtcaaatag atttcgaacg aagacctcct tcgttttata aaccattaga 137340  
taaagttgat ctcaagcogt cttttctggt gtaatattct agtttgtag tagatacata 137400  
tcaatatcat caaatcggag atccgaatta taaaatgggc gtggattgtt aactatagaa 137460  
tcggagctct gatattcgaa aatctgtgga gtttcaggtt ttggtggagg tgtaactgct 137520  
acttgggata ctgaagtctg atattcagaa agctggggga tgttctggtt cgccatccac 137580  
cgatgggtgc acatcactaa tcggttcogt aacgtctgtg gatggagggt ctactctac 137640  
agaacctgta gcctcagttg tcaacggagc tacttcaatg cgaggaaatg tataatttgg 137700  
taatggtttc tcctgtggat ctgaagaaga ggtaagatat ctactagaaa gataccgatc 137760  
acgttctagt tctcttttgt aaaacttaac tttttcttcc tcagcatcta gttgatattc 137820  
caacctcttc acgttactac gttcagatc caattcacgt tcgcatgggt tacctccgca 137880  
gtttttacga gcgatttcac gttcagcctt catgcgtctc tccctctctc tatcgagttt 137940  
atcagagcag tctttctgaa ggcgatcgaa ctccataaat ttctccaacg ctttgattgt 138000  
ttccatagat ttccgaagtt cagcttttag gactgtgatt ctttttcttt cgaattcaca 138060  
gctggatgta caaccgtttc cattacogcc atctctaagt ttcttttcta gatoggeaac 138120  
atttcatccc catgcctttt acattcctcg agtctactgt cgtcgaaata tcggtccagc 138180  
tccttttoga catcaataac tttagcacgt tgtctctcaa gctctctttt gtagttatct 138240  
gattccctgg cacgtttaag atcttcatgc aattgagtea gctcttaact tcctctcttg 138300  
cttcttcgtc atagtactta caatcactat gggatccatt gttaccacgt ctacactcgg 138360  
cgagctcgcg ttttaagagat tcaatttccc gtttgattg gtccatgttt ccattgctac 138420  
caccattaga tttacaggct gctagtgttc gttcagatc agaaatacgg gttttcttgg 138480  
aattgatttc gtcgatgtac ttggcatcga aacacttatt aagttctttt tccaattcta 138540  
cgattttatt tctttcgcga gtcaattccc tcctgtagta actatctggt ttgtcagatt 138600  
cacgtctctc acgtagactt tcttgcaagt tactaatttg ttcctagca cgtccgagtt 138660  
tagttttata tgetgaaatag agttctgatt catcctttga gcagatctct agegatcgtt 138720  
taagattcct gattctagtc tttagcctat ttacctctc agaagatggt ccgttaccgt 138780  
tgcgtttaca ctcgttaagc tgtctatcaa gatccatgat tctatctcta agacgttgca 138840

-continued

---

tctctcttcc catatcagca ttgctttcat tattacgtct gcagtcactc aactgtcttt 138900  
caatatctga gattctatct ctaagaogtc gcactctctct ctgtttcggc attggtttca 138960  
ttattacgtc tacagtcggt caactgtctt tcaagatctg atattctaga ttggagtctg 139020  
ctaactctcg tagcattttc acggcattca ctcagttgtc tttcaagatc tgagatttta 139080  
gattggagtc tgctaactct tgtaagattt cctcctccgc tctcagatgca gtcggtaaac 139140  
ttattctcta gttctctaact acgcaaacgc agtgcacaa cttcttgctg gtcttctctg 139200  
ttgctgttac attcactgag tctagattcg agatctctaa cgcgctgctg ttcttctca 139260  
agttctctgc gtactacaga aagcgtgtcc ctatcttggt gatatttagc aatttctgat 139320  
tctagagtac tgattttgct tacgtagtta ctaatagttg tcttggecct atcaagatcc 139380  
tccttgattt tgcgcattc cttgatatcc ctacgaagtc tggacagttc ccattcagaca 139440  
ttacgacggt tatcgatttc agctcggaga tcgtcctcgc gttgttttag ccacatacga 139500  
ctgagttcaa gttctcgttg acaagatcca tctacttttc cattcctaact agtatccagt 139560  
tccttttcta gttctgaacg catttctcgt tccctatcaa gcgattctct caattctcgg 139620  
atagtcctct tatcaatttc taataaatct gaaccatcat ctgtcccatt ttgaatatcc 139680  
ctgtgttctt tgatctcttt tgtaagtcgg tcgattcttt cggttttata aacagaatcc 139740  
ctttccaaag tcctaactct actgagttta tcaactaagtt ctgcattcaa ttcgggtgagt 139800  
tttctcttg gttcttccaa ctctgtttta aactctccac tatttccgca ttcttctcctg 139860  
catttatcta accattcaat tagttttatta ataactagtt ggtaatcagc gattcctata 139920  
gccgttcttg taattgtggg aacataatta ggatcttcta atggattgta tggcttgata 139980  
gcatcatctt tatcattatt aggggatgg acaacctaa ttggttggtc ctcactcct 140040  
ccagtagcgt gtgggtcttc aataccagtg ttagtaatag gcttaggcaa atgcttgctg 140100  
tacgogggca cttctcctc catcaagat ttataatcgg gttctacttc agaataattct 140160  
tttctaagag acgcgacttc gggagttagt agaagaactc tgtttctgta tctatcaacg 140220  
ctggaatcaa tactcaagtt aaggatagcg aatacctcat cgctcctcct cgtatcttct 140280  
gaaacacat catatgacat ttcattgaagt ctaacgtatt gataaataga atcagattta 140340  
gtattaaaca gatcctaac ctttttagta aacgcatact tatattttag atctccagat 140400  
ttcataatat gatcacatgc cttaaatgtc agtgcttcca tgatataatc tggaaacta 140460  
atgggtgacg aaaaagatac agcaccatat gctacgttga taaataaatc tgaaccacta 140520  
agtagataat gattaatggt aaggaaaaga aaatattcag tgtataggta tgtcttggcg 140580  
tcatatcttg tactaaacac gctaaacagt ttgttaatgt gatcaatttc caatagatta 140640  
attagagcag caggaatacc aacaaacata ttaccacatc cgtattttct atgaatatca 140700  
catatcatgt taaaaaatct tgatagaaga gcgaatatct cgtctgactt aatgagtcgt 140760  
agttcagcag caacataagt cataactgta aatagaacat actttcctgt agtggtgatt 140820  
ctagactcca catcaacacc attattaaaa atagttttat atacatcttt aatctgctct 140880  
ccgttaatcg tcgaacgctc tagtatacgg aaacacttg atttcttctc tgtagttaat 140940  
gacttagtga tatcacgaag aatattacga attacatttc ttgtttttct tgagagacct 141000  
gattcagaac tcaactcctc gttccatagt ttttctacct cagtggcgaa atctttggag 141060  
tgcttggtac atttttcaat aaggttcgtg acctccattt attataaaaa atttattcaa 141120  
aacttaacta caatcgggta attataagat cgtagatctc ccatgtggcg gaatactacc 141180

-continued

---

atctatcgca tgtggatgga cagtaggtaa tggccatggg aacagtaatg attgcatatt 141240  
tatctttctt gccagtatta ctgcatattg tcccaatggt tcgatgtgat gttctaacct 141300  
atcaactgcc gctgtatcac aacaatagtg tccgatgaaa ttaagattat gatccaatgt 141360  
gtttaatata tgattatcaa gtcttatacg atccgogtct ttttgacag gatcaggttc 141420  
ttctacagga agaagtttcg gcctcttatg atattcatgt ctgggaaacg gtggtctag 141480  
gtgaggctcc ggtatcggag tgggttttgg attataatca tcatcgtcta tgacatcacc 141540  
atcatcttcc acttcgatat ttattttgct atcttgatga tgcctcgtat cagttgcatt 141600  
ttcagcactc gactgaatat tagcgcattc attgtctatt attaccatat ttctaacc 141660  
aaaatgatg tgttgaacat cagtactatc gttgatgagt cttatagcat gaattcgcct 141720  
atcgttatcg ggtttatctt ctgtcacctt agcaattcct tttttattaa actctacata 141780  
atcatatcca tttctattgt ttgttctaata ataaacgagt atagcatcat tgctaaattt 141840  
ttcaatagta tcgaaaacag aatatcctaa accatataat atatatcag gaacactcaa 141900  
actaaatgac caggattctc ctaaatacgt aaactttaat agtgcgaaat cattcaaaaa 141960  
tctaccactt atagatagat agtacataaa tgcgtatagt agtctaccta tctctttatt 142020  
atgaaaaccg gcattacgat catatatgac gtgatatacc tgtgatccgt ttacgttaaa 142080  
ccataaatac atgggtgatc ctataaacat gaatttattt ctaattctca gagctatagt 142140  
taattgaccg tgtaaatattt gcttacatgc atacttgata cgctcattaa taagattttt 142200  
atcattgctc gttatttcag aatcgtatat ataaggagta ccacgtgat tcttaccaga 142260  
tattatacaa aatactatat ataaaatata ttgacccacg ttagtaatca tataaatggt 142320  
taacgtttta aattttgat tcaatgatcc attatcatc gctatcatgg tcttgtaata 142380  
ttcattcttt aaaatataat attgtgtag ccattgcatt ggggctccta atggagattt 142440  
tttattctca tccattttag gataggcttt cataaagtc ctaataactt cgtgaataat 142500  
gtttctatgt tttctactga tgcattgatt tgcctcatt tttttatccc atgtttcacc 142560  
tatcatagat ttaaacgcag taatgctcgc aacattaaca tcttgaaccg ttggtacaat 142620  
tccgttccat aaatttataa tgttcgcat ttatataact cattttttga atatactttt 142680  
aattaacaaa agagttaagt tactcatatg gacgcctcc agtctgaaca tcaatctttt 142740  
tagccagaga tatcatagcc gctccttagag tttcagcgtg attttccaac ctaaatagaa 142800  
cttcatcgtt gcgtttacia cacttttcta tttgttcaaa ctttgttgtt acattagtaa 142860  
tcttttttcc caaattagtt agccgttgtt tgagagtctc ctcatgtcg tcttcatcgg 142920  
ctttaacaat tgettccgct ttagcctctg gcttttttagc agcctttgta gaaaaaaatt 142980  
cagttgctgg aattgcaaga tcgtcatctc cggggaaaag agttccgtcc atttaaagta 143040  
cagattttag aaactgacac tctgcgttat ttatatttgg tacaacacat ggattataaa 143100  
tattgatggt aataacatca gaaaatgtaa agtctataca ttgttgcacc gtgttaaaatt 143160  
ttctaattgga tctagtatta ttgggtccaa cttctgctcg aaatccaaat atggaagcgg 143220  
atacaaaaacc gtttcctgga taaccacac atctccactt ttgctttaca tcagaaattg 143280  
tgctggtgac atcttgaact ctectatcta atgcccgtgt tccacctata gattttgaa 143340  
atcgaatgac tgcattagta gcattaaatt ccttaattt gccataattt tcatatattg 143400  
agtaaccctg gataaaaagt aaacacaccg cagcctcgc taccacaata aaaaaaattg 143460  
atagagagtt catttataat ctattagaag ctgacaaaat ttttttacac gcacagaca 143520  
atgctttaat aaatagttca acatctactt ttgtcatatc gaaccgatgg tatgattcta 143580

-continued

---

acctagaatt acatccgaaa aagttgacta tgttcatagt cattaagtca ttaacaaaca 143640  
acattccaga ctctggatta taagacgata ctgtttcgtc acaattacct accttaatca 143700  
tgtgattatg aatattggct attagagcac cttctaagaa atctataata tctttgaaac 143760  
acgatttaaa atcaaacccac gaatatactt ctacgaagaa agttagtta cccataggag 143820  
aaataactat aaatggagat ctaaatacaa aatccggatc tatgatagtt ttaacattat 143880  
tatattctct attaaatacc tccacatcta aaaatgtaa ttttgaaact atgtcttctg 143940  
ttattaccgt acctgaaact aacgctataa gctctattgt ttgagaactc tttaaacgat 144000  
attcttgaaa tacatgtaac aaagtctct ttaactcggc cggtttatct accatagtta 144060  
cagaatttgt atccttatct ataataat aatcaaaatc gtataaagtt atataattat 144120  
cgcgttcaga ttgggatctt tcaaataga ctaaaaacc ctttctcta gtaagtatct 144180  
tatgtatatg tttgtaaaat atcttcatgg tgggaatatg ctctaccgca gttagccatt 144240  
cctcattgac agcggtagat gtattagaca aaactattcc aatgtttaac aagggccatt 144300  
ttacgagatt attaaatct tgtttgataa atgtagccaa tgagggttcg agttcaacga 144360  
cgattgaatt ctctcccg cggatgctga tgatgaacga cgggatgttg ttcgattgat 144420  
ttggaattct ttttcgactt tttgtttata ttaaatatt taaaattat agcggatagc 144480  
aattcatgta ccacggataa tgtagacgcg tattgcgcac cgatatcttt attattagat 144540  
aaatttatca ataaatgtga gaagtttgc tcgttaaggt cttccattta aatattatat 144600  
aaacatttgt gtttgtatct tattcgtctt ttatggaata gtttttact agtaaagctg 144660  
caattacaca ctttgcogt aaaacataaa tataaacacc agcttttacc aatcgttcca 144720  
aaaagtcgac ggcggacatt ttaacatgg catctattt aaatacactt aggtttttgg 144780  
aaaaaacatc attttataat tgtaacgatt caataactaa agaaaagatt aagattaaac 144840  
ataagggat gtcatttga ttttataagc caaagcattc taccgttgtt aaatacttgt 144900  
ctggaggagg tatatatcat gatgatttgg ttgtattggg gaaggtaaca attaatgatc 144960  
taaagatgat gctattttac atggatttat catatcatgg agtgacaagt agtggagcaa 145020  
tttacaatt gggatcgtct atcogatagc tttctctaaa taggactatt gttacaaaag 145080  
ttaataatta tgatgatata tttttgacg acgatgattg atcgtattg cacaattttg 145140  
ttttttact ttctaataa cgttttagat tcttttcat gtgcgaatat tgatttacta 145200  
aaatatctat gtttaacttt tgtctataa cgtccttacc ggcggtatcg gtacatatac 145260  
gtaattcacc ttcacaaaat acggagtctt cgataataat agccaatcga ttattggatc 145320  
tagctgtctg tatcatatc aacatgttta atatacctt tcgtttcccc tttacaggca 145380  
tcgatcgtag catattttcc cgtctgaga tggaaatgtt aaaactacaa aaatgcgtaa 145440  
tgtagcccg tcctaataat ggtacgtgtc tataagtttg gcatagtaga ataatagacg 145500  
tgtttaaatg ccttccaaag ttttaagaat ctattagagt attgcattt gatagtttat 145560  
cgcctacatc atcaaaaata agtaaaaagt gtgctgattt tttatgattt tgtgcgacag 145620  
caatacattt ttctatgta cttttagtcc gtaacagatt atattctaga gattcctgac 145680  
tactaacgaa attaatatga tttggccaaa tgmtccatc ataactctggg ttataaacgg 145740  
gtgtaacaa gaatatatgt ttatatttt taactagtgt agaaaacaga gatagtaaat 145800  
agatagtttt tccagatcca gatcctccc ttaaaacat tctaaacggc atttttaata 145860  
aattttctct tgaaaattgt tttcttggga aacaattcat aattatatt acagttacta 145920

-continued

---

aattaatttg ataataaatc aaaatatgga aaactaaggt tgtagtagg gaggagaaca 145980  
aagaaggcac atcgtgacat aaataacatt tattatcatg atgacaccag aaaacgacga 146040  
agagcagaca tctgtgttct ccgctactgt ttacggagac aaaattcagg gaaagaataa 146100  
acgcaaacgc gtgattggtc tatgtattag aatatctatg gttatttcac tactatctat 146160  
gattaccatg tccgcgttcc tcatagtgcg cctaaatcaa tgcattgtctg ctaacgaggc 146220  
tgctattact gacgccgctg ttgccgttgc tgctgcatca tctactcata gaaaggttgc 146280  
gtctagcact acacaatatg atcacaaga aagctgtaat ggtttatatt accagggttc 146340  
ttggtatata ttacattcag actaccagtt attctcgat gctaaagcaa attgactgc 146400  
ggaatcatca aactaccoca ataataccga tgccttgact acctggctca ttgattatgt 146460  
tgaggataca tggggatctg atggtaatcc aattacaaaa actacatccg attatcaaga 146520  
ttctgatgta tcacaagaag ttgaaagta tttttgtgtt aaaacaatga actaatattt 146580  
atTTTTgtac attaataaat gaaatcgctt aatagacaaa ctgtaagtag gtttaagaag 146640  
ttgtcgggtgc cggccgctat aatgatgata ctctcaacca ttattagtgg cataggaaca 146700  
tttctgcatt acaagaaga actgatgcct agtgcttgcg ccaatggatg gatacaatac 146760  
gataaacatt gttatttaga tactaacatt aaaatgtcta cagataatgc ggtttatcag 146820  
tgctgtaaat tacgagccag attgcctaga cctgatacta gacatctgag agtattgttt 146880  
agtatttttt ataagatta ttgggtaagt ttaaaaaaga ccaataataa atgggttagat 146940  
attaataatg ataagatat agatattagt aaattaacaa attttaaaca actaaacagt 147000  
acgacggatg ctgaagcgtg ttatatatac aagctggaa aactggtaa aacagtatgt 147060  
aaaagtactc aatctgtact atgtgttaaa aaattctaca agtgacaaca aaaaatgaat 147120  
taataataag tcgttaacgt acgccgccat ggacgccggt tttgttatta ctccaatggg 147180  
tgtgttgact ataacagata cattgtatga tgatctgat atctcaatca tggactttat 147240  
aggaccatc attataggta acataaaaac tgcctaaata gatgtacggg atataaaata 147300  
ttccgacatg caaaaatgct actttagcta taagggtaaa atagttcctc aggattctaa 147360  
tgatttggct agattcaaca tttatagcat ttgtgccca tacagatcaa aaaataccat 147420  
catcatagca tgcgactatg atatcatggt agatatagaa gataaacatc agccatttta 147480  
tctattccca tctattgatg tttttaacgc tacaatcata gaagcgtata acctgtatac 147540  
agctggagat tatcatctaa tcatcaatcc ttcagataat ctgaaaatga aattgtcgtt 147600  
taattcttca ttctgcatat cagacggcaa tggatggatc ataattgatg ggaatgcaa 147660  
tagtaatttt ttatcataaa agttgtaaag taaataataa aacaataaat attgaactag 147720  
tagtacgtat attgagcaat cagaaatgat gctggtacct cttatcacgg tgaccgtagt 147780  
tgccggaaca atattagtat gttatatatt atatatgtt aggaaaaaga tacgtactgt 147840  
ctataatgac aataaaatta tcatgacaaa attaaaaaag ataagagtt ctaattccag 147900  
caaatctagt aatcaactg atagcgaatc agactgggag gatcactgta gtgctatgga 147960  
acaaaacaat aacgtagata atatttctag gaatgagata ttggacgatg atagcttcgc 148020  
tggtagttta atattgggata acgaaatccaa tgttatggcg cctagcacag aacacattta 148080  
cgatagtgtt gctggaagca cgtcgtcaat aaataatgat cgtaatgaac agactattta 148140  
tcagaacact acagtagtaa ttaatgaaac ggagactggt aaagtactta atgaagatac 148200  
caaacagaat cctaactatt catccaatcc tttcgtaaat tataataaaa ccagtatttg 148260  
tagcaagtca aatccgttta ttacagaact taacaataaa tttagtgaga ataatccgtt 148320

-continued

---

tagacgagca catagcgatg attatcttaa taagcaagaa caagatcatg aacacgatga 148380  
tatagaatca tcggtcgtat cattggtgtg attagtttcc tttttataaa attgaagtaa 148440  
tatttagtat tattgctgcc gtcacgttgt acaaatggag atattccctg tattcggcat 148500  
ttctaaaatt agcaatttta ttgctaataa tgactgtaga tattatatag atacagaaca 148560  
tcaaaaaatt atatctgatg agatcaatag acagatggat gaaacggtag ttcttaccaa 148620  
catcttaagc gtagaagtgt taaatgacaa tgagatgtac catcttattc ctcatagatt 148680  
atcgacgatt atactctgta ttagtctgtg cggaggatgt gttatctcta tagataatga 148740  
catcaatgac aaaaatattc taacctttcc cattgatcat gctgtaatca tatccccact 148800  
gagtaaatgt gtcgtagtta gcaagggtcc tacaaccata ttggttgta aagcggatat 148860  
acctagcaaa cgattggtaa catcgtttac aaacgacata ctatatgtaa acaatctgtc 148920  
actgattaat tatttgcogt tgtctgtatt cattattaga cgagtcaccg actatttga 148980  
tagacacata tgcgatcaga tatttgctaa taataagtggt tattccctta taaccatcga 149040  
cgataagcaa tatectattc catcaaactg tataggtatg tcctctgcca agtacataaa 149100  
ttctagcatc gagcaagata ctttaatcca tgtttgtaac ctcgagcatc cgttcgactc 149160  
agtatacaaa aaaatgcagt cgtacaattc tctacctatc aaggaacaaa tattgtacgg 149220  
tagaattgat aatataaata tgagcattag tatttctgtg gattaataga tttctagat 149280  
gggatcatt aatcatctct aatctctaaa tacctcataa aacgaaaaa aagctattat 149340  
caaatactgt acggaatgga ttcattctct tctcttttta tgaaactctg ttgtatatct 149400  
actgataaaa ctggaagcaa aaaatctgat aaaaagaata agaataagat caaggattat 149460  
atggaacacg attattataa aataacaata gttcctgggt cctcttccac gtctactagc 149520  
tcgtgggtatt atacacatgc ctgtaaatag tctctttgcg ttgacggaaa gcagactaga 149580  
aataacaggc taaaatgttc agacaccata atagttccca acccagataa taacagagtt 149640  
ccatcaacac attcctttaa actcaatccc aaacccaaaa ccgttaaaat gtatccggcc 149700  
aattgatagt agataatgag gtgtacagcg catgataatt tacacagtaa ccaaaatgaa 149760  
aacactttag taattataag aaatatagac ggtaatgtca tcatcaacaa tccgataata 149820  
tgcttgagag taaacattga tggataaaac aaaaatgctc cgcataactc tatcatggca 149880  
ataacacaac caaaccttg taaaattcct aaattagtag aaaatacaac ggatctgat 149940  
gtataagtga tctcgagaaa taataagaat aaagtaatgc ccgtaaagat aaacatcaac 150000  
attgtttggg aatcattaaa ccaattagta tgaagttgaa ctaatttcac agtagatatt 150060  
attccagtat tatccccgca tgtatacgtg cctggtaaga tatctttata ttccataatc 150120  
aatgagacat cactatctga taacgaatga agtctagcac tagtatgcca tttacttaat 150180  
attgctgtct tggaagtttt attataagtt aaaaatcat ggttatccaa tttccatcta 150240  
atatactttg tcggattatc tatagtacac ggaataatga tggatcatt acatgctgta 150300  
tactctatgg tctttgtagt tgttataaca accaacgtat agaggatat caacgatatt 150360  
ctaactcttg acatttttta tttattttaa atgatacctt tgttatttat tttattctat 150420  
tttgctaacg gtattgaatg gcataagttt gaaacgagtg aagaataat ttctacttac 150480  
ttattagacg acgtattata cacgggtgtt aatggggcgg tatacacatt ttcaataat 150540  
aaactaaaca aaactggttt aactaataat aattatataa caacatctat aaaagtagag 150600  
gatgcggata aggatacatt agtatcgga accaataacg gaaatcccaa atggttgaaa 150660

-continued

---

atagacgggt cagacgaccc aaaacataga ggtagaggat acgctcctta tcaaaatagc 150720  
aaagtaacga taatcagtc caacggatgt gtactatctg acataaacat atcaaaagaa 150780  
ggaattaaac gatggagaag atttgacgga ccatgtgggt atgatttatt cacggcggat 150840  
aacgtaattc caaaagatgg tttacgagga gcattcgtcg ataaagacgg tacttatgac 150900  
aaagtttaca ttcttttcac tgatactatc ggctcaaaga gaattgtcaa aattccgtat 150960  
atagcacaaa tgtgcttaaa cgacgaaggt ggtccatcat cgttgtctag tcatagatgg 151020  
tcgacgtttc tcaaagtcga attagaatgt gatatcgacg gaagaagtta tagacaaatt 151080  
attcattcta gaactataaa aacagataat gatacgatc tatatgtatt cttcgatagt 151140  
ccttattcca agtccgcat atgtacctat tctatgaata ccattaaaca atctttttct 151200  
acgtcaaaat tggaaggata tacaaagcaa ttgccgtctc cagctcctgg tatatgttta 151260  
ccagctggaa aagttgttcc acataccacg tttgaagtc tagaaaaata taatgtacta 151320  
gatgatatta taaagccttt atctaaccaa cctatcttcg aaggaccgtc tgggtttaa 151380  
tggttcgata taaaggagaa ggaaaatgaa catcgggaat atagaatata cttcataaaa 151440  
gaaaattcta tatattcgtt cgatacaaaa tctaacaaa ctctagctc gcaagtcgat 151500  
gcgcgactat tttcagtaat ggtaacttcg aaaccgttat ttatagcaga tatagggata 151560  
ggagtaggaa tgccacaaat gaaaaaata cttaaaatgt aatcttaatc gagtacacca 151620  
cacgacaatg aacaacata agacagatta tgctgggtat gcttgcgtcg taatagcgg 151680  
tctaattgtc ggaattatth ttacagcgac actatataaa gttgtagaac gtaaattagt 151740  
tcatacacca tcaatagata aaacgataaa agatgcatat attagagaag attgtcctac 151800  
tgactggata agctataata ataatgtat ccatttatct actgatcgaa aaacctggga 151860  
ggaaggacgt aatgcatgca aagctctaaa tccaaattcg gatctaatta agatagagac 151920  
tccaaacgag ttaagtttt taagaagcct tagacgcgga tattgggtag gagaatccga 151980  
aatattaaac cagacaaccc catataatth tatagctaag aatgccacga agaattggaac 152040  
taaaaaacgg aaatatatth gtgacacaac gaatactccc aaactgcatt cgtgttacac 152100  
tatataacaa ttacactaca tttttatcat accactactt cggttagatg ttttagaaaa 152160  
aaataaatat cgccgtaccg ttcttgthtt tataaaaaa acaattaaca attatcaaat 152220  
ttttctttha atattttacg tggttgacca ttcttggttg taaaataatc tcttagtgtt 152280  
ggaatggaat gctgtttaat gttccacac tcatcgtata ttttgacgta tgtagtcaca 152340  
tcgtttacgc aatagtcaga ctgtagttct atcatgcttc ctacatcaga aggaggaaca 152400  
gttttaaagt ctcttggtth taatctatta ccgttagthtt tcatgaaatc ctttgthtt 152460  
tccacttcac attttaata aatgtccact atacattctt ttgttaatth tactagatcg 152520  
tcatgggtca tagaatttat aggttccgta gtccatggat ccaaactagc aaacttcgcg 152580  
tatacggat cgcgattagt gtatacacca actgtatgaa aattaagaaa acagtthaat 152640  
agatcaacag aaatattthaa tcctccgtht gatacagatg cgccatattt atggatttcg 152700  
gattcacacg ttgtttgtct gaggtgttcg tctagtgttg cttctacgta aacttcgatt 152760  
cccatatatt ctttattgtc agaatcgcat accgatttht catcatacac tgtttgaaaa 152820  
ctaaatggta tacacatcaa aataataaat aataacgagt acattctgca atattgttat 152880  
cgtaattgga aaaatagtgt tcgagtgagt tggattatgt gagtattgga ttgtatattt 152940  
tattttatat tttgtaataa gaataaaatg ctaatgtcaa gtttattcca atagatgtct 153000  
tattaaaaac atatataata aataacaatg gctgaatggc ataaaattat caggatattc 153060

-continued

---

tcaaaaaata ataagttoga ggatgcoGCC atcgttgatt acaagactac aaagaatgtt 153120  
ctagctgcta ttctaacag aacatttgc aagattaatc cgggtgaaat tattcctctc 153180  
atcactaatc gtaatatctt aaaacctctt attggtcaga aatattgtat tgtatatact 153240  
aactctctaa tggatgagaa cacgtatgct atggagtgc ttactgggta cgcccctgta 153300  
tctccgatcg ttatagcgag aactcatacc gcacttatat ttttgatggg taagccaaca 153360  
acatccagac gtgacgtgta tagaacgtgt agagatcacg ctaccctgt acgtgcaact 153420  
ggtaattaaa ataaaaagta atattcatat gtagtgtcaa ttttaaatga tgatgatgaa 153480  
atggataata tccatattga cgatgtcaat aatgcoggtta ttggcataca gttcatcgat 153540  
ttttagattt cattcagagg atgtggaatt atgttatggg catttgtatt ttgataggat 153600  
ctataatgta gtaaatataa aatataatcc gcatattcca tatagatata attttattaa 153660  
tcgcacgtta accgtagatg aactagacga taatgtcttt tttacacatg gttatttttt 153720  
aaaacacaaa tatggttcac ttaatcctag tttgattgic tcattatcag gaaacttaaa 153780  
atataatgat atacaatgct cagtaaatgt atcgtgtctc attaaaaatt tggcaacgag 153840  
tacatctact atattaacat ctaaacataa gacttattct ctacatcggg ccacgtgtat 153900  
tactataata ggatcacgatt ctattatag gtataaagat ataaatgaca agtataatga 153960  
catctatgat tttactgcaa tatgtatgct aatagcgtct acattgatag tgaccatata 154020  
cgtgtttaaa aaaataaaaa tgaactotta attatgctat gctattagaa atggataaaa 154080  
tcaaaattac ggttgattca aaaattggta atgttggtac catatcgtat aacttggaaa 154140  
agataactat tgatgtcaca cctaaaaaga aaaaagaaaa ggatgtatta tttagcgaat 154200  
cagttgctgt cgaagaggca aaagatgtca aggtagaaga aaaaaatatt atcgatattg 154260  
aagatgacga tgatattgat gtgaaagcg cataatacga tctataaaaa taagtatata 154320  
aatacttttt atttactgta ctcttactgt gtatgggtga taccctactc aattattttt 154380  
ttaaaaaat acttattctg attcttctaa ccatttccgt gttcgttcga atgcccacac 154440  
gacgtcaaa ataggggaggt agttgaaatc tagttctgca ttgttggtac gcacctcaaa 154500  
tgtagtggtg gatattctca acgtatagtt gttgagtagt gatgggtttc taaatagaat 154560  
tctcttcata tcattcttgc acgcgtacat ttttagcacc catcttgga tcttagatcc 154620  
ttgttctatt ccaaatgggt tcacaaatag aagattaaac atatcgtacg aacacgatgg 154680  
agagtaatcg tagcaaaagt aagcatttcc tttaatctca gatcccggt actggatata 154740  
ttttgcagcc aacacgtgca tccatgcaac atttctcaca tatacccgcc tatgcaaccg 154800  
gtcatcatcg actgtacgat acataatggt accgtgttgc ttacattgct cgtaaaagac 154860  
ttctgcaat ttgtctcctt ctccgtaaat tccagtggtt cttaggcaac aagtatacaa 154920  
ttttgctcca tccatgatta cgaattatt ggctttcata accagttgct cggccatcag 154980  
tttacttttt gcgtatacat gtccctgggtga tatatcataa agggtagtct catggccgat 155040  
gaatggatca ccgtgtttat tgggtcctat tgcttccatg ctactagtat agatcaaata 155100  
cttgattcct aggtccacac aagctgocaa aatagtctgt gttccataat agtttacttt 155160  
catgatttca ttatcgtgtt attttccaaa tacatccact agagcagccg tatgaataat 155220  
cagatttacc ccacttagcg cttctctcac cttatcaaag tcgtttatat cacattgtat 155280  
atagtttata accttaactt tcgaggttat tgggttggtga tcttctacaa tatctatgac 155340  
tctgatttct tgaacatcat ctgcactaat taacagtttt actatatacc tgccatgaaa 155400

-continued

---

tccggcacca ccagtaaccg cgtacacggc cattgctgcc actcataata tcagactact 155460  
tattctatct tactaaataa tggctgtttg tataatagac cagcataata tcagaggagt 155520  
tatttacttt gaaccagtc atggaaaaga taaagtttta ggatcagtta ttggattaaa 155580  
atccggaacg tatagtttga taattcatcg ttacggagat attagtcaag gatgtgattc 155640  
cataggcagt ccagaaatat ttatcggtaa catctttgta aacagatag gtgtagcata 155700  
tgtttattta gatacagatg taaatatatc tacaattatt ggaaaggcgt tatctatttc 155760  
aaaaaatgat cagagattag cgtgtggagt tattggtatt tcttacataa atgaaaagat 155820  
aatacatttt cttacaatta acgagaatgg cgtttgatat atcagttaat gcgtctaaaa 155880  
caataaatgc attagtctac tttctactc agcaaaataa attagtcata cgtaatgaag 155940  
ttaatgatac aactacact gtcgaatttg atagggacaa agtagttgac acgtttattt 156000  
catataataa acataatgac accatagaga taagaggggt gcttcagag gaaactaata 156060  
ttggttgcgc ggtaataacg ccggttagta tgacttactt gtataataag tatagtttta 156120  
aactgatttt agcagaatat ataagacaca gaaatactat atccggcaat atttattcgg 156180  
cattgatgac actagatgat ttggctatta aacagtatgg agacattgat ctattattta 156240  
atgagaaact taaagtagac tccgattcgg gactatttga ctttgtcaac tttgtaaagg 156300  
atatgatatg ttgtgattct agaatagtag tagctctatc tagtctagta tctaaacatt 156360  
gggaattgac aaataaaaaa tatagtgta tggcattagc cgaacatata tctgatagta 156420  
ttccaatata tgagctatct agactacgat acaatctatg taagtatcta cgcggacaca 156480  
ctgagagcat agaggataaa tttgattatt ttgaagacga tgattcgtct acatgttctg 156540  
ccgtaaccga cagggaacg gatgtataat ttttttata gcgtgaagga tatgataaaa 156600  
aatataattg ttgtatttat ccattctaa tcacettata tgattctgta acacaataaa 156660  
ggagtctcat agatgatag aggtcagata ctggtttgat aaactgttta ttccacataa 156720  
gtatgtttga ctttatgggt agaccgcgt actttaacaa atcactgaaa attggagtta 156780  
ggatttgacc tctcagaatc agttgocgt ctggaacatt aaatgtattt tttatgatat 156840  
actccaacgc atttatgtgg gcatacaaca agtcattact aatggagtat tccaagagt 156900  
ttagttgtct agtatttaac aagagaagag atttcaacag actgtttatg aactcgaatg 156960  
ccgctcatt gtcgcttata ttgatgatgt cgaattctcc caatatcatc actgatgagt 157020  
agctcatctt gttatcggga tccaagtttt ctaaagatgt cattaaacct tcgatcatga 157080  
atggatttat catcatcgtt tttatgttgg acatgagctt agtccgtttg tccacatcta 157140  
tagacgacga tttctgaatt atttcatata tccctctctt taactccagg aacttgtcag 157200  
gatggtctac ttaaatatgt tctcgtctaa gagatgaaaa tctttggatg gttgcaocg 157260  
acttttctct aaaggatgac gttgcccag atcctctctt aaatgaatcc atcttacct 157320  
tggaacaagt ggacagtcta ttttcttag atggtttaat atttttgtta cccatgatct 157380  
ataaagtag acctaactgt ctcgatgac ctatatattt atttcagtt ttattatag 157440  
cataaattgt aaaaaatag ttaggtttac aaaaatgtct cgtggggcat taatcgtttt 157500  
tgaaggattg gacaaactg gaaaaacaac acaatgatg aacatcatgg aatctatacc 157560  
ggcaaacacg aaaaaatc ttaactttcc tcagagatcc actgtcactg gaaagatgat 157620  
agatgactat ctaactcgt aaaaaacct taatgatcat atagttaate tattattttg 157680  
tgcaaataga tgggagtttg catcttttat acaagaaca ctagaacagg gaattacttt 157740  
aatagttgat agatcgcgt tttctggagt agcgtatgcc gccgctaaag gcgctcaat 157800

-continued

---

gactctcagt aagagttatg aatctggatt gcctaaaccc gacttagtta tattcttga 157860  
atctggtagc aaagaaatta atagaaacgt cggcgaggaa atttatgaag atgttacatt 157920  
ccaacaaaag gtattacaag aatataaaaa aatgattgaa gaaggagata ttcattggca 157980  
aattatctct tctgaattcg aggaagatgt aaagaaggag ttgattaaga atatatgtat 158040  
agaggctata cacacggtta ctggaccagt ggggcaactg tggatgtaat agtgaaatta 158100  
cattttttat aaatagatgt tagtacagtg ttataaatgg atgaagcata ttactctggc 158160  
aacttggaaat cagtactcgg atacgtgtcc gatatgcata ccgaactcgc atcaatatct 158220  
caattagtta ttgccaagat agaaactata gataatgata tattaacaa ggacattgta 158280  
aattttatca tgtgtagatc aaacttggat aatccattta tctcttctct agatactgta 158340  
tatactatta tagatcaaga gaactatcag actgagttga ttaattcatt agacgacaat 158400  
gaaattatcg attgtatagt taataagttt atgagctttt ataaggataa cctagaaaat 158460  
atagtagatg ctatcattac tctaaaatat ataatagaata atccagattt taaaactacg 158520  
tatgccgaag tactcggttc cagaatagcc gatatagata ttaaaccaagt gatacgtaag 158580  
aatatactac aattgtctaa tgatatccgc gaacgatatt tgtgaaaaat attaaaaaaa 158640  
aatacttttt ttattaaatg acgtcgcctc gcgaatttag aaaattatgc tgtgatatat 158700  
atcacgcacg aggatataaa gaaaaatcta aattaattag agactttata acagataggg 158760  
atgataaata tttgatcatt aagctattgc ttcccggatt agacgataga atttataaca 158820  
tgaacgataa acaaaattata aaattatata gtataatatt taaacaatct caggaagata 158880  
tgctacaaga tttaggatag ggatataatag gagacactat taggactttc ttcaaagaga 158940  
acacagaaat ccgtccacga gataaaagca ttttaacttt agaagaagtg gatagttttt 159000  
taactacggt atcatccgta actaaagaat cgcacaaat aaaattattg actgatgtag 159060  
catctgtttg tacatgtaat gattttaaatt gtgtagtcat gcttattgat aaagatctaa 159120  
aaattaaagc gggcctcogg tacgtaacta acgctattag tcctcatgcc tatgatgtgt 159180  
ttagaaaatc taataacttg aaagagataa tagaaaatc atctaaacaa aatctagact 159240  
ctatatctat ttctgttatg actccaatta atcccagtt agcggaaatcg tgtgattctg 159300  
tcaataaggc gtttaaaaaa tttccatcag gaatgtttgc ggaagtcaaa tacgatggtg 159360  
aaagagtaca agttcataaa aataataacg agtttgcctt ctttagtaga aacatgaaac 159420  
cagtactctc tcataaagtg gattatctca aagaatacat accgaaagca tttaaaaaag 159480  
ctacgtctat cgtattggat tctgaaattg ttctttaga cgaacataat gtaccgctcc 159540  
cgtttggaag tttaggtata cacaaaaaga aagaatataa aaactctaac atgtgtttgt 159600  
tcgtgtttga ctgtttgtac tttgatggat tcgatatgac ggacattcca ttgtacgaac 159660  
gaagatcttt tctcaaagat gttatgggtg aaatacccaa tagaatagta ttctcagagt 159720  
tgacgaatat tagtaacgag tctcagttaa ctgacgtatt ggatgatgca ctaacgagaa 159780  
aattagaagg attggtctta aaagatatta atggagtata cgaaccggga aagagaagat 159840  
ggtaaaaaat aaagcgagac tatttgaacg agggttccat ggcagattct gccgatttag 159900  
tagtactagg tgcttactat ggtaaaggag caaagggttg tatcatggca gtctttctaa 159960  
tgggttggtta cgacgatgaa tccggtaaat ggaagacggt taccaagtg tccaggacacg 160020  
atgataatc gttaaaggag ttgcaagacc aattaaagat gattaaaatt aacaaggatc 160080  
ccaaaaaaat tccagagtgg ttagtagtta ataaaatcta tattcccgat tttgtagtag 160140

-continued

---

aggatccaaa acaatctcag atatgggaaa tttcaggagc agagtttaca tcttccaagt 160200  
cccataccgc aaatggaata tccattagat ttcttagatt tactaggata agagaggata 160260  
aaacgtggaa agaatctact catctaaacg atttagtaaa cttgactaaa tcttaatagt 160320  
tacatataaa ctaaaaatta aaataacact atttagtggg tggctgccat ggatggtgtt 160380  
attgtatact gtctaaacgc gctagtataa catggcgagg aaataaataca tataaaaaat 160440  
gatttcatga ttaaacctatg ttgtgaaaga gtttgtgaaa aagtcaagaa cgttcacatc 160500  
gacggacaat ctaaaaacaa tacagtgatt gcagatttgc catatctgga taatgctgta 160560  
tccgatgtat gcaaatcgat atatatatag tatcaagaat atccagattt gctaatttga 160620  
taaagataga tgacgatgac aagactocta ctgggtgata taattatfff aaacctaaag 160680  
atgttattoc tgttatcata tctataggaa aggataaaga tgtctgtgaa ctattaatct 160740  
catcagacat atcgtgtgca tgcgtggagt taaattcata tcacgtagcc attcttccca 160800  
tggatgtttc cttttttacc aaaggaaatg catcattgat tattctcctg tttgatttct 160860  
ctatcgatgc ggcacctctc ttaagaagtg taaccgataa taatgttatt atatctagac 160920  
accagcgtat acatgacgag cttccgagtt ccaattggtt caagttttac ataagtataa 160980  
agtccgacta ttgttctata ttatatatgg ttgttgatgg atctgtgatg catgagatag 161040  
ctgataatag aactcacgca attattagca aaaatatatt agacaatact acgattaacg 161100  
atgagtgtag atgctgttat tttgaaccac agattaggat tcttgataga gatgagatgc 161160  
tcaatggatc atcgtgtgat atgaacagac attgtattat gatgaattta cctgatgtag 161220  
gccaatttgg atctagtatg ttggggaaat atgaacctga catgattaag attgctcttt 161280  
cgggtggctgg taatttaata agaaatcgag actacattcc cgggagacga ggatatagct 161340  
actacgttta cggtatagcc tctagataat ttttttaagc acgaaataaa aaacataatt 161400  
ttaaaccaat ctatttcata ctattttgtg tgatcaccat ggacataaag atagatatta 161460  
gtatttctgg tgataaattt acggtgacta ctaggagggg aatgaagaa agaaaaaaat 161520  
atctacctct ccaaaaagaa aaaactactg atgttatcaa acctgattat cttgagtacg 161580  
atgacttgtt agatagagat gagatgttta ctattctaga ggaatatttt atgtacagag 161640  
gtctattagg cctcagaata aaatatggac gactctttaa cgaaattaaa aaattcgaca 161700  
atgatgcgga agaacaattc ggtactatag aagaactcaa gcagaaactt agattaaatt 161760  
ctgaagaggg agcagataac tttatagatt atataaaggt acaaaaacag gatatcgtca 161820  
aacttactgt atacgattgc atatctatga taggattgtg tgcctcgtg gtagatgttt 161880  
ggagaaatga gaaactgttt tctagatgga aatattgttt acgagcgtt aaactgttta 161940  
ttgatgatca catgcttgat aagataaaat ctatactgca gaatagacta gtgtatgtgg 162000  
aaatgtcata gaaagttaaa agttaatgag agcaaaaata tataaggttg tattccatat 162060  
ttgttatfff tttctgtaat agttagaaaa atacattcga tggctctatct atcagattat 162120  
tatgtgttat aaggactttt ttctcataat aaactagagt atgagtaaga tagtgttttt 162180  
caaaacatat aaatctaaaa ttgatggatg agatatacag ctattaatff cgaaaatata 162240  
ttttaactcg ataactttaa acatggattt ttgatggtgg tttaacgttt taaaaaaga 162300  
ttttgttatt gtagtatatg ataataataa aagatggata taaagaatff gctgactgta 162360  
tgactatfff ttacattac tacattggct acggcagata tacctacttc gteactgcca 162420  
cacgctccgg taaacggggc atgtgacgag ggagaatata ttgataagag gcataatcaa 162480  
tgttgtaatc ggtgtccacc tggagaatff gccaaagttt gatgtaatgg taacgataac 162540

-continued

---

acaaaatgtg aacgctgccc acctacataca tataccgcaa tceccaatta ctctaattga 162600  
tgtcatcaat gtagaaaatg cccaacagga tcatttgata aggtaaagtg taccggaaca 162660  
cagaacagta aatgttcgtg tcttcctggg ttggtattgctg ctactgattc ttcacagact 162720  
gaagattgtc gagattgtat accaaaaagg agatgtccat gctgatactt tgggtgaata 162780  
gatgaacaag gaaatcctat ttgtaaatcg tgttggtgtg gtgaatattg cgactaccta 162840  
cgtaattata gacttgatcc atttcctcca tgcaaacatct ctaaattgtaa ttaattatga 162900  
ttttgatgat aatgttacca tacattatat cgctacttgg ttagtgtatt attcagtatg 162960  
aagacctatt aataattact tatcttttga cgatcttgtt ataattataa tataaaaact 163020  
tatggcatag taacttataa ttgctgacgc gataaattcg taataatctg tttgttcaa 163080  
aggaatctac aggcataaaa ataaaaatat aatttataat atactcttac agcgcgccat 163140  
catgaataac agcagtgatg tgattgctgt tattaatgga tttagaaata gtggacgatt 163200  
ttgtgatatt agtatagtta ttaatgatga aaggataaac gctcataaac tcatcctatc 163260  
tggagcctcc gaatatTTTT ccattctgtt ttccaataat tttatcgatt ctaatgaata 163320  
cgaagttaat ctaagtcatt tagattatca aagtgttaac gatttgatcg attatattta 163380  
tgggatacct ttgagcctaa ctaacgataa cgtgaaatat attctttcaa ccgctgattt 163440  
tttacaatgg gtagctgcta ttacggagtg tgaataaac atacttaaaa atctttgttc 163500  
tagaaactgt atcgatttct acatatacgc tgataaatat aataacaaga aaatagaatc 163560  
agcgtcgttt aacacaatat tacaaaaatat tttgagactc atcaacgatg aaaaatttaa 163620  
atacttaaca gaggaatcaa tgataaaaat ttttaagcat gatatgttaa atataaaaa 163680  
tgaggatttc gcccactaa ttctcattha atggttagag agtactcaac aacctgcac 163740  
cgctgagtta cttaaatgcc tcagaatatc attgctttcc ccacaagtta taaaatcact 163800  
ttatagtcct cgactgggta gttcaatcta cgaatgtata acattcttaa acaatatagc 163860  
attcttggat gaatcatttc ctagatacca tagcatcgag ttgatatcta tcggtataag 163920  
taattcgcct gataagattt ccataaactg ctacaatcat aaaaaaata catgggaaat 163980  
gatattctca cgtagatata ggtgtagttt cgcagtgccc gctctggata atattattta 164040  
tatgatgggt ggatgatgac agtcccgtg tagaagttca aaggttatag cgtacaatac 164100  
atgtacaaat tcttggatat atgatatacc agagctaaaa tatcctcgtt ctaattgttg 164160  
gggactggct gatgacgaat acattttattg tatagggggc atacgcgatc aggattcacc 164220  
gttgacatct agtattgata aatggaagcc atcaaaacca tattggcaga agtatgctaa 164280  
aatgcgcgaa ccaaaatgtg atatgggggt tgcgatgta aacggattaa tatatgttat 164340  
aggtggaatc gttaaagggt acacgtgtac cgacgcacta gagagtttat cagaagatgg 164400  
atggatgaag catcaacgct ttccaataaa aatgtccaat atgtcgacga ttgttcatga 164460  
tggcaagatt tataatctg gaggttacia caatagtagt gtagttaatg taatatcgaa 164520  
tctagtcctt agctataatt cgatatatga tgaatggacc aaattatcat cattaacat 164580  
tctagaatt aatcccgtc tatggtcagc gcataataaa ttatatgtag gaggaggaaat 164640  
atctgatgat gttcgaacta atacatctga aacatagat aaagaaaaag attgttgac 164700  
attggataat ggtcacgtgt taccacgcaa ttatataatg tataaatgag aaccgattaa 164760  
acataaatat ccattggaaa aaacacagta cacgaatgat tttctaaagt atttggaag 164820  
ttttataggt agttgataga acaaaaataca taattttgta aaaataaatc actttttata 164880

-continued

---

ctaatatgac acgattacca atacttttgt tactaatatc attagtatac gctacacctt 164940  
ttcctcagac atcttaaaaa ataggtgatg atgcaactct atcatgtaat cgaataata 165000  
caaatgacta cgttggtatg agtgcttggg ataaggagcc caattccatt attcttttag 165060  
ctgctaaaag tgacgtcttg tattttgata attatacca ggataaaata tcttacgact 165120  
ctccatacga tgatctagtt acaactatca caattaaatc attgactgct agagatgccg 165180  
gtacttatgt atgtgcattc tttatgacat cgcctacaaa tgacactgat aaagtagatt 165240  
atgaagaata ctccacagag ttgattgtaa atacagatag tgaatcgact atagacataa 165300  
tactatctgg atctacacat tcaccgaaa ctagtcttga gaaacctgat tatatagata 165360  
attctaattg ctgcgctgta ttgaaatcg cgactccgga accaattact gataatgtag 165420  
aagatcatac agacaccgct acatacacta gtgatagcat taatacagta agtgcacat 165480  
ctggagaatc cacaacagac gagactccgg aaccaattac tgataaagaa gaagatcata 165540  
cagtacacaga cactgtctca tacaactacag taagtacatc atctggaatt gtcactacta 165600  
aatcaaccac cgatgatgcg gatcttcatg atacgtacaa tgatacagta ccatcaacta 165660  
ctgtaggcgg tagtacaacc tctattagca attataaac caaggacttt gtagaaat 165720  
ttggtattac cgcattaatt atattgtcgg ccgtggcaat tttctgtatt acgtattata 165780  
tatgtaataa acgttcacgt aaatacaaaa cagagaacaa agtctagatt tttgacttac 165840  
ataaatgtct gggatagtaa aatctatcat attgagcgg ccatctggtt taggaaagac 165900  
agccatagcc aaaagactat gggaaatata ttggatttgt ggtgtcccat accactagat 165960  
ttcctcgtcc tatggaacga gaaggtgctg attaccatta cgtaacaga gaggccatct 166020  
ggaagggaaat agccgcccga aactttctag aacatactga gtttttagga aatatttacg 166080  
gaacttctaa aactgctgtg aatacagcgg ctattaataa tcgtatttgt gtgatggatc 166140  
taaaccatcga tggcgtaga agtcttaaaa atacgtacct aatgccttac tcggtgtata 166200  
taagacctac ctctcttaaa atgggtgaga ccaagcttcg ttgtagaaac actgaagcta 166260  
acgatgagat tcacgtcgtg gtgatgttg caaaaactga catggatgag gcaggtgaag 166320  
ccggtctatt cgacactatt attattgaag atgatgtgaa tttagcatat agtaagttaa 166380  
ttcagatact acaggaccgt attagaatgt attttaacac taattagaga cttaagactt 166440  
aaaacttgat aattaataat ataactcgtt tttatagtgt tctatttcaa cgtctaattg 166500  
attagttaaa tattaaaact taccacgtaa aacttaaat ttaaatgat atttcattga 166560  
cagatagatc acacattatg aactttcaag gacttgtgtt aactgacaat tgcaaaaatc 166620  
aatgggtcgt tggaccatta ataggaagaa gtggatttgg tagtatttat actactaatg 166680  
acaataatta tgtagtaaaa atagagocca aagctaacgg atcattattt accgaacagg 166740  
cattttatc tagagtactt aaacctccg ttatcgaaga atggaaaaaa tctcacaata 166800  
taaagcacgt aggtcttacc cgtgcaagg catttggctc atacaaatcc attaatgtgg 166860  
aatatcgatt cttggaatt aatagattag gtgcagatct agatgcggtg atcagagcca 166920  
ataataatag actacaaaa aggtcgggtg tgttgatcgg aatcgaaatc ttaaatacca 166980  
tacaatttat gcacgagcaa ggatattctc acggagatat taaagcgagt aatatagtct 167040  
tggatcaaat agataagaat aaattatctc tagtggatta cggattgggt tctaaattca 167100  
tgtctaattg cgaacatggt ccatttataa gaaatccaaa taaatggat aacggtactc 167160  
tagaatttac acctatagat tcgcataaag gatacgttgt atctagacgt ggagatctag 167220  
aaacacttgg atattgtatg attagatggt tgggaggtat cttgccatgg actaagatat 167280

-continued

---

ctgaaacaaa gaattgtgca ttagtaagtg ccacaaaaca gaaatatggt aacaatactg 167340  
cgactttggt aatgaccagt ttgcaatatg aacctagaga attgctgcaa tatattacca 167400  
tggtaaacctc tttgacatat tttgaggaac ccaattacga caagtttcgg cacatattaa 167460  
tgcaggggtg atattattaa gtgtggtgtt tggtcgagt aaaatttttg tcgataaaaa 167520  
ttaaaaaata acttaattta ttattgatct cgtgtgtaca accgaaatca tggcgatggt 167580  
ttacgcacac gctctcggtg ggtacgacga gaattctcat gcctttcctg gaatcatc 167640  
gactgttgcc aatgatgtca ggaatatc tgttgtgta gtttataata acaagatga 167700  
cattgtaaaa gacaaatata tgtggtgta cagtcagggtg aacaagagat atattggagc 167760  
actgtgcct atgtttgagt gcaatgaata tctacaaatt ggagatccga tccatgatca 167820  
agaaggaat caaatctcta tcatcacata tcgccacaaa aactactatg ctetaagcgg 167880  
aatcgggtac gagagtctag acttgtgttt ggaaggagta gggattcacc atcacgtact 167940  
tgaaacagga aacgctgtat atggaaaagt tcaacatgat tattctacta tcaaagagaa 168000  
ggccaaagaa atgaatgcac ttagtccagg acctatcacc gattaccacg tctggatag 168060  
agattgtatc tgtcaagtta ctgctgtgga cgtacatgga aaggaaatta tgaaaatgag 168120  
attcaaaaag ggtcgggtgc ttcgatccc aaatctggtt aaagttaaac ttggggagaa 168180  
tgatacagaa aatctttctt ctactatacc ggccgcacca tcgaggtaac cacctctctg 168240  
gaagacagcg tgaataatgt actcatgaaa cgtttgaaa ctatacgcca tatgtggtct 168300  
gttgtatatg atcattttga tattgtgaat ggtaagaat gctgttatgt gcatacgcat 168360  
ttgtctaacc aaaatctat accgagtact gtaaaaaaa atttgtacat gaagactatg 168420  
ggatcatgca tcaaatgga tccatgga gctctagagt atcttagcga actgaaggaa 168480  
tcagggtgat ggagtcacc accagaaatg caggaatttg aatatccaga tggagtggaa 168540  
gacactgaat caattgagag attggtagag gagttcttca atagatcaga acttcaggct 168600  
ggtgaatcag tcaaatgtg taattctatt aattgttaaa catacatctg tttcagctaa 168660  
gcaactaaga acacgtatac ggcagcagct tctctttata ctctcatctt ttaccaacac 168720  
aaaggggtga tattttgtca ttggagttga taataataca cacaaagtat ttggattcac 168780  
ggtgggttac gactacctca gactggtaga gaatgatata gaaaagcata tcaaagact 168840  
ttgtgtgtg tatttctgtg agaagaaaga ggacatcaag tacgcgtgtc gattcatcaa 168900  
ggtatataaa cctggggatg aggctaactc gacatcgtg tgcgctatca aagtggaaag 168960  
atgctgtgtg gctgtgtttg cagattggcc agaatcatgg tatatggata ctaatggat 169020  
caagaagtat tctccagatg aatgggtgtc acatataaaa ttttaattaa tgtaatagag 169080  
aacaataat aaggttgtaa tatcatatag acaataacta acaattaatt agtaactgtt 169140  
atctcttttt taactaacca actaactata tacctattaa tacatcgtaa ttatagttct 169200  
taacatctat taatcattaa ttcgcttctt taatttttta taaactaaca ttgttaattg 169260  
aaaagggata acatgttaca gaatataaat tatatatgga tttttttaa aaggaaatac 169320  
ttgactggag tatatattta tctcttcatt atatagcagc cgtgttttcc aatttttcca 169380  
catcccatat aatacaggat tataatctcg ttcgaacata cgagaaagtg gataaaacaa 169440  
tagttgattt tttatctagg ttgccaaatt tattccatat tttagaatat ggggaaaata 169500  
ttctacatat ttattctatg gatgatgcta atacgaatat tataattttt tttctagata 169560  
gagatataaa tattaataag aacgggtcat ttatacaca tctcgggtta tcatcatcca 169620

-continued

---

ttaatataaa agaatatgta tatcaattag ttaataatga tcatccagat aataggataa 169680  
gactaatgct tgaaaatgga cgtagaacaa gacatttttt gtcctatata tcagatacag 169740  
ttaatataccta tatatgtatt ttaataaatc atggatttta tatagatgcc gaagacagtt 169800  
acggttgtac attattacat agatgtatat atcactataa gaaatcagaa tcagaatcat 169860  
acaatgaatt aattaagata ttgttaata atggatcaga ttagatataa aaagatcgt 169920  
acggaacac accttttacc ctattatgta aacacgatat caacaacgtg gaattgtttg 169980  
agatatgttt agagaatgct aatatagact ctgtagactt taatagatat acacctcttc 170040  
attatgtctc atgtcgtaat aaatatgatt ttgtaaagtt attaatcttc aaaggagcaa 170100  
atgttaatgc gcgtaataaa ttccggaacta ctccatttta ttgtggaatt atacacggta 170160  
tctcgcctat aaaactatat ttggaatcag acacagagtt agaaatagat aatgaacata 170220  
tagttcgtca ttaataaatt ttgatgctg ttgaatcttt agattatcta ttatccagag 170280  
gagttattga tattaactat cgtactatat acaacgaaac atctatttac gacgctgtca 170340  
gttataatgc gtataatcag ttggtctatc tattaacag aaatggatgat ttgagacga 170400  
ttactactag tggatgtaca tgtatttcgg aagcagtcgc aaacaacaac aaaataataa 170460  
tggaagtact attgtctaaa cgaccatctt tgaaaattat gatacagctc atgatagcaa 170520  
ttactaaaca taaacagcat aatgcagatt tattgaaat gtgtataaaa tatactgctt 170580  
gtatgaccga ttatgatact cttatagatg tacagtcgct acagcaatat aaatggatata 170640  
ttttaaaatg ttctgatgaa atagatatca tgaagagatg ttatataaaa aataaaactg 170700  
tattccaatt agttttttgt atcaaagaca ttaactcttt aatgagatc ggtaaacatc 170760  
cttctttcgt gaaatgcact agtctcagc tatacggagc tcgtgtacgt aatatcatag 170820  
catctattag atatcgtcag agattaatta gtctattatc caagaagctg gatcctggag 170880  
ataaatggtc gtgttttctt aacgaaataa aatataaaat attggaaaac ttaacgata 170940  
acgaaactatc cacatatcta aaaatcttat aaacactatt aaaatataaa atctaagtag 171000  
gataaaatca cactacatca ttgtttctt ttatgtctc acagtgata ctatttttaa 171060  
cgctcataaa taaaatgaa aacgatttcc gttgttacgt ttttatgct actacctgct 171120  
gttgtttatt caacatgtac tgtaccact atgaataacg ctaaattaac gtctaccgaa 171180  
acatcgttta atgataaaca gaaagttaca tttacatgag atcagggata tcattcttcg 171240  
gatccaaatg ctgtctcaga aacagataaa tggaaatcag aaaatccatg caagaaaatg 171300  
tgcacagttt ctgattacat ctctgaacta tataataaac cgctatacga agtgaattcc 171360  
accatgacac taagtgtcaa cggcgaaca aaatattttc gttgcaaga aaaaaatgga 171420  
aatacttctt ggaatgatac tgttacgtgt cctaatgcgg aatgtcaacc tcttcaatta 171480  
gaacacggat cgtgtcaacc agttaaagaa aaatactcat ttggggaata tatgactatc 171540  
aactgtgatg ttggatata ggttattggt gcttcgtaca taagtgtac agctaattct 171600  
tggaatgta ttccatcatg tcaacaaaaa tgtgatatgc cgtctctatc taacggatta 171660  
atctccggat ctacattttc tatcgtggc gttatcacat ttagttgtaa aagtggtttt 171720  
acactaacgg ggtctccatc atccacatgt atcgacggta aatggaatcc cgtactccca 171780  
acatgtgtac gaactaacga aaaatttgat ccagtggatg atggcccga cgatgagaca 171840  
gatttgagca aactctcga agacgttgta caatatgaac aagaaataga atcgttagaa 171900  
gcaactatc atataatcat agtggcgttg acaattatgg gcgtcatatt ttaactctc 171960  
gttatagat tagttttctc ctgtgacaaa aataatgacc aatataagtt ccataaattg 172020

-continued

---

ctaccgtgaa tataaatocg ttaaaataat taataattta ataacaaaca agtatcaaaa 172080  
gattaaagac ttatagctag aatcaattga gatgtcttct tcagtggatg ttgatatcta 172140  
cgatgccgtt agagcatttt tactcaggca ctattataac aagagattta ttgtgtatgg 172200  
aagaagtaac gccatattac ataatatata caggctattt acaagatgcg cegttatacc 172260  
gttcgatgat atagtacgta ctatgccaaa tgaatcacgt gttaacaat gggatgatga 172320  
tacacttaat ggtataatga tgaatgaacg cgatgtttct gtaagcgttg gcaccggaat 172380  
actattcatg gaaatgtttt tcgattacaa taaaaatagt atcaacaatc aactaatgta 172440  
tgatataatt aatagcgtat ctataattct agctaagtag agatatagaa gcgcttttaa 172500  
cgacgatggt atatacatcc gtgaaatat gattaacaag ttgtacggat acgcactctc 172560  
aactactatt ggcacgatcg ctggagggtg ttgttattat ctgttgatgc atctagttag 172620  
tttgataaaa taattatttc aatatactag ttaaaatttt aagattttaa atgtataaaa 172680  
aactaataac gtttttattt gtaatagggt cattagcatc ctattcgaat aatgagtaca 172740  
ctccgtttaa taaactgagt gtaaaactct atatagatgg agtagataat atagaaaatt 172800  
catatactga tgataataat gaattgggtg taaattttaa agagtacaca atttctatta 172860  
ttacagagtc atgcgacgtc ggatttgatt ccatagatat agatgttata aacgactata 172920  
aaattattga tatgtatacc attgactcgt ctactattca acgcagagggt cacacgtgta 172980  
gaatatctac caaattatca tgccattatg ataagtaccc ttatattcac aaatatgatg 173040  
gtgatgagcg acaatattct attactgcag agggaaaatg ctataaagga ataaaatag 173100  
aaataagtat gatcaacgat gatactctat tgagaaaaca tactcttaaa attggatcta 173160  
cttatataatt tgatcgtcat ggacatagta atacatatta ttcaaatat gatttttaaa 173220  
aatttaaaat atattatcac ttcagtgaca gtagtcaaat aacaaacaac accatgagat 173280  
atattataat tctcgcagtt ttgttcatta atagtataca tgctaaaata actagttata 173340  
agtttgaatc cgtcaatttt gattccaaaa ttgaatggac tggggatggg ctatacaata 173400  
tatcccttaa aaattatggc atcaagacgt ggcaacaat gtatacaaat gtaccagaag 173460  
gaacatacga catatccgca tttccaaaga atgatttcgt atctttctgg gttaaatttg 173520  
aacaaggcga ttataaagtg gaagagtatt gtacgggact atgcgtcgaa gtaaaaattg 173580  
gaccaccgac tgtaacatta actgaatacg acgaccatat caatttgtac atcgagcatc 173640  
cgatgctac tagaggtagc aaaaagattc ctatttaca acgcggtgac atgtgtgata 173700  
tctacttgtt gtatacggct aacttcacat tcggagattc taaagaacca gtaccatag 173760  
atategatga ctacgattgc acgtctacag gttgcagcat agactttgtc acaacagaaa 173820  
aagtggtcgt gacagcacag ggagccacag aagggtttct cgaaaaaatt actccatgga 173880  
gttcgaaagt atgtctgaca cctaaaaaga gtgtatatac atgcgcaatt agatccaaag 173940  
aagatgttcc caatttcaag gacaaaatgg ccagagttat caagagaaaa tttataaac 174000  
agtctcaatc ttatttaact aaatttctcg gtagcacatc aaatgatgtt accacttttc 174060  
ttagcatgct taacttgact aaatattcat aactaatttt tattaatgat acaaaaacga 174120  
aataaaactg catattatac actggttaac gcccttatag gctctaacca ttttcaagat 174180  
gaggtccctg attatagtc tctgttccc ctctatcacc tactccatgt ctattagacg 174240  
atgtgagaag actgaagagg aaacatgggg attgaaaata gggttgtgta taattgcca 174300  
agatttctat cccgaaagaa ctgattgcag tgttcacatc ccaactgcaa gtgaaggatt 174360

-continued

---

gataactgaa ggcaatggat tcagggatat acgaaacacc gataaattat aaaaaagca 174420  
atgtgtccgc tgtttccggt aataatacta tttttgtaac tggcgaatta ttcataaata 174480  
actctaatag cacgatcgtg gttaacaata tggaaaaact tgacatttat aaagacaaac 174540  
aatggtcgat tatagaaatg cctatggcta gggatatca cggcatcgac tcgacatttg 174600  
gaatgttata ttttccgga ggtctatccg ttaccgaaca atatggtaat ttagagaaaa 174660  
acaacgagat atcttgttac aatcctagaa cgaataagtg gtttgatatt tcatatacta 174720  
tttataagat atccatatca tcattgtgta aactaaataa cgtcttctat gtatttagta 174780  
aggacattgg atatgtggaa aagtatgatg gtgcacggaa gttagtacat gatcgtctcc 174840  
ccgctataaa ggcattatca acttctcctt attgattgaa aatgaaaata taaatagttt 174900  
ttatgcatag cagtattacc ctatagtttt attgcttact actaacatgg atacagatgt 174960  
tacaagtga gaagatatca taaatgaaat agatagagag aaagaagaaa tactaaaaaa 175020  
tgtagaaatt gaaaaataa aaaacattaa caagaatcat ccaagtggat atattagaga 175080  
agcactcgtt attaatacca gtagtaatag tgattccatt gataaagaag ttatagaatg 175140  
tatcagtcac gatgtaggaa tatagatcat atctactaat ttttataatc gatacaaaac 175200  
ataaaaaaca actcgttatt acatagcagg catggaatcc tccaagtatt gttttgataa 175260  
cgatggcaag aaatggatta tcggaaatac tttatattct ggtaattcaa tactctataa 175320  
ggtcagaaaa aatttcacta gttcgttcta caattacgta atgaagatag atcacaaatc 175380  
acacaagcca ttgttgtctg aaatacgatt ctatatactt gtattggatc ctttgactat 175440  
cgacaactgg acacgggaac gtggataaaa gtatttggtt attccagatc tgtatggaat 175500  
tggagaaacc gatgattata tgttcttcgt tataaagaat ttgggaagag tattcgcccc 175560  
aaaggatact gaatcagttc tcgaagcatg cgtcactatg ataaacacgt tagagtttat 175620  
acactctcaa ggatttacc atggaaaaat agaaccgagg aataactga ttagaaataa 175680  
acgtcttca ctaattgact attctagaac taacaaacta tacaagatg gaaactcaca 175740  
tatagattac aacagggaca tgataactc aggaaatata aattatatgt gtgtagacaa 175800  
tcatcttggg gcaacagttt caagacgagg agatttagaa atgttgggat attgcatgat 175860  
agaatggttc ggtggcaaac ttccatggaa aaacgaaagt agtataaaag taataaaaca 175920  
aaaaaaagaa tataaaaaat ttatagctac tttctttgag gactgttttc ctgaaggaaa 175980  
tgaacctctg gaattagtta gatatataga attagtatac acgttagatt attctcaaac 176040  
tcctaattat gacagactac gtaaaactgt tatacaagat tgaaattata ttcttttttt 176100  
tatagagtgt ggtagtgtta cggatattta atattagact atctctatcg cgctacacga 176160  
ccaatatcga ttactatgga tatcttctat gaaaggagag aatgtattca tttctccagc 176220  
gtcaatctcg tcagtattga caatactgta ttatggagct aatggatcca ctgctgaaca 176280  
gctatcgaaa tatgtagaaa aggaggagaa cacggataag gttagcgcctc aaaaatctc 176340  
attcaaatcc ataaataaag tatatggcg atattctgcc gtgtttaaag attctttttt 176400  
gggaaaaatt ggcgataagt ttcaactgt tgacttcaact gattgtcgca ctatagatgc 176460  
aatcaacaag tgtgtagata tctttactga ggggaaaatc aatccactat tggatgaacc 176520  
attgtctcct agcaattagt gccgtatact ttaaagcaaa atggttgacg ccattcgaaa 176580  
aggaatttac cagtattat cctttttacg tatctccgac ggaaatggta gatgtaagta 176640  
tgatgtctat gtacggcgag ctatttaatc acgcatctgt aaaagaatca ttcggcaact 176700  
tttcaatcat agaactgcca tatgttgag atactagtat gatggcatt cttccagaca 176760

-continued

---

agattgatgg attagaatcc atagaacaaa atctaacaga taaaaatfff aagaaatggt 176820  
gtgactttat ggatgctatg tttatagatg ttcacattcc caagtttaag gtaacagggt 176880  
cgtataatct ggtggatact ctagtaaaagt caggactgac agagggttcc ggttcaactg 176940  
gagattatag caatatgtgt aatttagatg tgagtgtcga cgctatgatc cacaaaaagt 177000  
atatagatgt caatgaagag tatacagaag cagctgcagc aacttctgta ctagtggcag 177060  
actgtgcatc aacagttaca aatgagttct gtgcagatca tccgttcatc tatgtgatta 177120  
ggcatgttga tggcaaaatt cttttcgttg gtagatattg ctctccaaca actaattggt 177180  
aaccatffff tttaaaaaaa tagaaaaaac atgtggattt agtgcaggtc gttgttcttc 177240  
caattgcaat tggtaagatg acggccaact ttagtaccca cgtcttttca ccacagcact 177300  
gtggatgtga cagactgacc agtattgatg acgtcaaaaa atgtttgact gaatatatff 177360  
attggtcgtc ctatgcatac cgcaacaggc aatgcgctgg acaattgtat tccacactcc 177420  
tctcttttag agatgatgcg gaattagtgt tcatcgacat tccgagctg gtaaaaaata 177480  
tgccgtggga tgatgtcaaa gattgtacag aatcatccg ttgttatata ccggatgagc 177540  
aaaaaacat cagagagatt tccggcatca tccgactttg tgcataatgct gctacttact 177600  
ggggagggtga agaccatccc actagtaaca gtctgaacgc attgtttgtg atgcttgaga 177660  
tgctaaatta cgtggattat aacatcatat tccggcgtat gaattgatga gttgtacatc 177720  
ttgacatfff ctttctctc tctcccttt cttctctct ccttctctc ctcttctccc 177780  
tttcccagaa acaaacffff ttcccacta taaaataaaa tgagtatact acctgttata 177840  
tttcttcta tattttttta ttcttcattc gttcagactt ttaacgcgc tgaatgtatc 177900  
gacaaagggc aatattttgc atcatcctg gagttagaaa acgagccagt aatcttacca 177960  
tgctctcaaa taaatacgtc atcatccgga tataatatat tagatatttt atgggaaaaa 178020  
cgaggagcgg ataatgatag aattataccg atagataatg gtagcaatat gctaattctg 178080  
aaccgcacac aatcagactc tggattttat atatgcatta ccacgaacga aacctactgt 178140  
gacatgatgt cgttaaattt gacaatcgtg tctgtctcag aatcaaatat agatcttatc 178200  
tcgtatccc aaatagtaaa tgagagatct actggcgaaa tggtagtctc caatattaat 178260  
gcattttatg ctagtaacgt aaacgcagat attatatgga gcggacatcg acgctttaga 178320  
aataagagac ttaacaacgc gacacctgga attattacca tagaagatgt tagaaaaaat 178380  
gatgctgggtt attatacatg tgttttagaa tatatatata gaggtaaaac atataacgta 178440  
accagaattg taaaattaga ggtacgggat aaaataatc cttctactat gcaattacca 178500  
gatggcattg taacttcaat aggtagtaat ttgactattg cgtgtagagt atcgttgaga 178560  
cctcccacaa cggatgcaga cgtcttttgg ataagtaatg gtatgtatta cgaagaagat 178620  
gatggggacg gaaacggtag aataagtgtg gcaataaaa tctatatgac cgataagaga 178680  
cgtgttatta catcccgtt aaacattaat cctgtcaagg aagaagatgc tacaacgttt 178740  
acgtgtatgg cgtttactat tcttagcatc agcaaacag ttactgttag tataacgtga 178800  
atgtatgtg ttacatttcc atgtcaattg agtttataag aatffffata cattatcttc 178860  
caacaaacaa ttgacgaacg tattgctatg attaactccc acgatactat gcatattatt 178920  
aatcattaac ttgcagacta tacctagtgc tattttgaca tactcatggt cttgtgtaat 178980  
tgccgtatct atattattaa agtacgtaaa tctagctata gttttattat ttaatfftag 179040  
ataatatacc gtctccttat ttttaaaaa tgccacatcc tttatffaat catgaatggg 179100

-continued

---

aatttctatg tcatcgtag tatattgtga acaacaagag cagatatcta taggaaaggg 179160  
tggaatgcga tacattgatc tatgtagttt taaaacacac gcgaactttg aagaatttat 179220  
ataaatcatt ccatcgatac atccttctat gttgacatgt atatatccag gaattctttt 179280  
attaatgtca ggaaatgat aactaaaaac attgcccga agcgggtgct ctatctgct 179340  
tatatccggt ctaacttac aaaatgtaac caatactttt gcatgacttg tttgttctcg 179400  
caacgttagt ttaacttga cgaatggatt aattacaata gcatgatccg cgcactctatt 179460  
aagttttttt actttaacgc ccttgtatgt ttttacagag actttatcta aatttctagt 179520  
gcttgtatgt gttataaata taacgggata tagaactgaa tcacctacct tagataccca 179580  
attacatttt atcagatoca gataataaac aaattttgtc gccctaacta attctatatt 179640  
gttatataatt ttacaattgg ttatgatatc atgtaataac ttggagtcta acgcgcatcg 179700  
tcgtacgttt atacaattgt gatttagtgt agtatatcta cacatgtatt tttccgcact 179760  
atagtattct ggactagtga taaaactatc gttatatctg tcttcaatga actcatcgag 179820  
atattgctct ctgcatatt catcacctg cataaacttt ctgacatct tacaatccgt 179880  
gttatttttag gatcatattt acatattttac gggatatca aagatgtag attagttaat 179940  
gggaatcgtc tataataatg aatattaaac aattatata ggacttttac cacaaagcat 180000  
cataaaaatg agtcgctgctc tgatttatgt tttaaatatc aaccggaat caactcataa 180060  
aatacaagag aatgaaatat atacatattt tagtcattgc aatatagacc atactctac 180120  
agaacttgat tttgtagtta aaaactatga tctaaacaga cgacaacctg taactgggta 180180  
tactgcacta cactgctatt tgtataataa ttactttaca aacgatgtac tgaagatatt 180240  
attaatcat ggagtggatg taacgatgaa aaccagtagc ggacgtatgc ctgtttatat 180300  
attgcttact agatggtgca atatttcaca tgatgtagtg atagatatga tagacaaaga 180360  
taaaaaccac ttattacata gagactattc caacctatta ctgagtata taaaatctcg 180420  
ttacatgtta ttaaggaag aggatatcga tgagaacata gtatccactt tattagataa 180480  
gggaatcgat cctaacttta aacaagacgg atatacagcg ttacattatt attattgtg 180540  
tctcgcacac gtttataaac caggtgagtg tagaaaaccg ataacgataa aaaaggccaa 180600  
gcgaattatt tctttgttta tacaacatgg agctaacta aacgcgtag ataattgtg 180660  
taatacacca ttccatttgt atcttagtat tgaaatgtgt aataatattc atatgactaa 180720  
aatgctgttg acttttaac cgaatttga aatatgtaat aatcatggat taacgcctat 180780  
actatggtat ataacttccg actacataca acacgatatt cttgttatgt taatacatca 180840  
ctatgaaaca aatgttggag aatgcccgat agatgagcgt cgtatgatcg tattcgagtt 180900  
tatcaaaaca tattctacac gtccgocaga ttcgataact tatttgatga ataggtttaa 180960  
aaatataaat atttataccc gctatgaagg aaagacatta ttacacgtag catgtgaata 181020  
taataataca cacgtaatag attatcttat acgtatcaac ggagatataa atgcgttaac 181080  
cgacaataac aacacgcta cacaactcat tatagataac aaagaaaatt cccatatac 181140  
cattaattgt ttactgtata tacttagata tattgtagat aagaatgtga taagatcgtt 181200  
ggtggatcaa cttccatctc tacctatctt tcgctgctta tcatactagt catatctaa 181260  
atggtgatca tattccacca aatgattgtg aaagagattg agattaaac gtctaacaaa 181320  
caattagttt ttatgacatt aacatataat aaataaatta atcattattg acttaacgat 181380  
gacgaaagt atcatcatct taggattctt gattattaat acaaatcat tgtctatgaa 181440  
atgtgaacaa ggtgtctcat attataattc acaagaatta aagtgttga aactatgtaa 181500

-continued

---

gccaggaaca tattcagatc atcgatgtga taaatacagc gataaccattt gtggacattg 181560  
tccgagtgac acattcacgt caatatataa tcgttctcct tgggtgcata gttgtagagg 181620  
tccatgtggt actaatcgag tagaggtcac acctgtgaca cctaccacaa atagaatctg 181680  
tcattgtgac tcgaatagtt attgtctcct taaagcttct gatggtaact gtgttacatg 181740  
tgctcctaaa acaaaatgtg gtcgtgggta tggaaaaaaa ggagaagatg aaatgggtaa 181800  
taccatttgt aagaaatgtc ggaagggtac ttattcagat attgtatctg actctgatca 181860  
atgtaaacca atgacaagat aagacttact cgcctctact ggatagacat aaaaatcct 181920  
cctcgttaata atgaaatata aatatacact aattattaat atcaataaca atcgagtatt 181980  
aatatatagg tcatttttaa atcccttttg ggttccgtcc caaacggcgt ttcggctctg 182040  
gtcgcgcgca tggccatgcc gagcctctcc gcgtgctcct ccatcgagga cgacttcaac 182100  
tatggcagct cgggtggcgtc tgccagcgtg cacatacгаа tggcatttct aagaaaagtc 182160  
tacggtatcc tttgtctaca atttctttta acaacggcaa caactgcagt atttttatac 182220  
tttgactgca tgcggacatt tatacaaggg agtctgttc taatattggc atcaatgttc 182280  
ggatctatag gcttgatttt cgcattgact ttacacagac ataaacatcc cctgaatctg 182340  
tacctgcttt gtggatttac actgtcggaa tctctaaccg tggcctctgt tgttactttc 182400  
tatgatgtgc atgtcgttat gcaagcttcc atgtgacta ctgcagcgtt tcttgetctg 182460  
actacatata ctctacaatc aaagagagat ttcagtaaac ttggagcagg attgtttgc 182520  
gctttgtgga ttttaatttt gtcaggactc ttggggatat ttgtgcaaaa tgagacagt 182580  
aagctggtcc tgtctgcttt tggggccctt gtattctgtg gattcattat ctatgacacg 182640  
cactcactaa tacataagct ctgcctgaa gagtatgtgt tagcctctat caatctctac 182700  
ttggatatca tcaatctggt cttgcactctg ttgcagcctt tggaaatc taataagaaa 182760  
taaagttaa aatagaatta ataaaaacat ataggctatt ttttaaacat ggattggaaa 182820  
ccaaggtagt tagttaatac acacaagata tatttttttc acatcatcca cccatgggta 182880  
acaccaaggt tgttagttaa taatatacaa gatatttttt ctcaactctga tccatgtaaa 182940  
ccaaggacga gataagacac tctcattcct catccacaac ccattaaaaa aatggaaatt 183000  
aaagccctct attagcataa acggctacag gtctaccatc aggttaacct tcgtctacct 183060  
tcacaatggc ctctccttgt gccaaagtca gaccctgtca ttgccacgct actaaggact 183120  
cctgaatac cgtggccgac gtcagacatt gtctgactga atacatcctg tgggtttctc 183180  
atagatggac ccatagagaa agcgcagggt ctctctacag gcttctcctc tctttcagaa 183240  
ctgatgcaac ggagctcttt ggtggtgagt tgaaggattc acttccgtgg gacaattgcy 183300  
tggagatcat taaatgttcc atcagaaatg actccatgaa aaccgcccga gaacttctgt 183360  
caatcattgg actttgtact caatcagcta tcgtctctgg aagagtctc aacgataagt 183420  
atcgcagat actacttatg ctgcgaaaga ttctgaacga gaacgactat ctcacctct 183480  
tggatcatat ccgcaactgt aaatactaaa tctccttcat gctctctcac tacacttttt 183540  
atcatcttat gaggaatgat tgccctcgtg aaataggaat aattagcacc agaatagcta 183600  
tggattattg tggtagagag tgcactattt tatgtcgtct actggatgaa gatgtgacgt 183660  
acaaaaaat aaaaccagag attgaaacgt gtcacaactt atcaaacat atagatagac 183720  
gaggaacaa tgcgctacat tgttacgtct tcaataaatg cgatacagac attaagattg 183780  
tccgctgtt actctctcgc ggagtcgaga gactttgtag aaacaacgaa ggattaactc 183840

-continued

---

cgctaggagc atacagtaag catagatacg tcaaatctca gattgtgcat ctactgatat 183900  
 ccagctattc gaattcctct aacgaactca agtcgaatat aatgatttc gatctgtatt 183960  
 cggataatat cgacttacgt ctgctaaaat acctaatgt ggataaacgg atacgtccgt 184020  
 ccaagaatac gaattatgca atcaatggtc tcggattggg ggatatatac gtaacgacgc 184080  
 ctaatccgag accagaagta ttgctatggc ttcttaaadc agaatgttac agcaccgggt 184140  
 acgtatttcg tacctgtatg tacgacagtg atatgtgtaa gaactctctt cattactata 184200  
 tatcgtctca tagagaatct caatctctat ccaaggatgt aattaaatgt ttgatcgata 184260  
 acaatgtttc catccatggc agagacgaag gaggatcttt acccatccaa tactactggt 184320  
 cttgtctaac catagatata gagattgta aattattaat aaaggatgtg gacacgtgta 184380  
 gagtatacga cgtcagccct atattagagg cgtattatct aaacaagcga tttagagtaa 184440  
 cccatataa tgtagacatg gaaatcgta atcttcttat tgagagacgt catactcttg 184500  
 tcgacgtaat gcgtagtatt acttcgtacg attccagaga atataaccac tacatcatcg 184560  
 ataacattct aaagagattt agacaacagg atgtacaagc catgttgata aactacttac 184620  
 attacggcga tatggtaagt atacctatca ttcaatgcat gttggataac ggagcaacca 184680  
 tggataagac gacggacaac aactatctc tcgacgacta ctttgtaaat aataatctcg 184740  
 tcgatgtaaa cgtcgtaaag tttatcgtgg aaaatagga cacgcggctg taaatcacat 184800  
 atcgaacaat ggcctctat gtatgtacgg tctgatatta tcgagattta ataattgctg 184860  
 gtatcactgt tatgaaacca tactgataga tgtatttgat atactaagca agtacatgga 184920  
 tgatatagat atgatcgata actctactat attacgcggc cgatgtcaat aatatacaat 184980  
 ttgcaaagcg gttattggaa tatggagcga gtgtcacgct cgataatcaa tacggccatc 185040  
 cagaaaagca gttacagaag agaaaacaaa acgaagctag ttgatttatt actgagttac 185100  
 catcccctc tagagactat gattgacgca ttaaatagag atatacgcta tctatctct 185160  
 gaaccattat tcgcctgtat cagatacgcc ttaatcctag atgatgattt tccttctaaa 185220  
 gtaaagtatg atatcgccgg tcgtcataag gaactaaagc gctatagagc agacattaat 185280  
 agaatgaaga atgtctacat atcaggcgtc tccatgttg atataattt taaacgaagc 185340  
 aaacgccaca gattgagata cgcaaagaat ccgacatcaa atggtacaaa aaagaactaa 185400  
 cgtccatcat tacagaaact gtaaagaaca atgagaggat cgactccata gtggacaaca 185460  
 ttaatacaga cgataacttg atttcgaaat taccatgga gatactttat tactccatta 185520  
 aataatttat catggagcga taatgtcctg tttcatttgt ttccatgaca tattcaaaa 185580  
 tcgattccgt ccaagatgat aaaaacattt accggcatca taaacacgga gtttatttta 185640  
 tatgtctcgc ataaacatta ctaaaaaaat atattgttct gtttttctt ttcttttct 185700  
 tttctttcg tacatctcta attatgaaaa agtaaatcat tatgagatgg acgagattgt 185760  
 acgcatcgtt cgcgatagta tgtggtttat acctaacgta tttatggacg acggtaagaa 185820  
 tgaaggtcac gtttctgtca acaatgtctg tcatatgtat ttcacgttct ttgatgtgga 185880  
 tacatcgtct catctgttta agctagtatt taaacactgc gatctgaata aacgaggtaa 185940  
 ctctccatta cattgctata cgatgaatac acgatttaac ccatctgtat taaagatatt 186000  
 gttacaccac ggcgatcgta actttgatag caaggatgac cactatcaat cgataacaag 186060  
 atctttgata tactaacgga caccattgat gactttagta aatcatcga tctattgctg 186120  
 tgttatctta gatataaatt caatgggagc ttaaactatt acgttctgta caaaggatcc 186180  
 gaccctaatt gcgccgacga ggatgaactc acttctcttc attactactg taaacacata 186240

-continued

---

tccacgttct acgaaagcaa ttattacaag ttaagtcaca ctaagatgcg agccgagaag 186300  
cgattcatct acgcgataat agattatgga gcaaacatta acgcggttac acacttacct 186360  
tcaacagtat accaaacata gtccctcgtgt ggtgtatgct cttttatctc gaggatagct 186420  
aataatcttg attgtacacc catcatggaa cgattgtgca acaggtcata ttctcataat 186480  
gttactcaat tggcacgaac aaaaggaaga aggacaacat ctactttatc tattcataaa 186540  
acataatcaa ggatacactc tcaatatact acggtatcta ctagataggt tcgacattca 186600  
gaaagacgaa tactataata ccgcctttca aaattgtaac aacaatggtg cctcatacat 186660  
cggatacgac atcaaccttc cgactaaaga cggatttcga cttgggtgtt gaaaacagaa 186720  
acatcatata caaggcggat gttgtgaatg acatcatcca ccacagactg aaagtatctc 186780  
tacctatgat taaatcgttg ttctacaaga tgtctctccc tacgacgatt actacgtaa 186840  
aaagatacta gcctactgcc tattaagga cgagtcattc gcggaactac atagtaaatt 186900  
ctgtttaaac gaggactata aaagtgtatt tatgaaaaat atatcattcg ataagataga 186960  
ttccatcacc gtgacataag tcgccttaaa gagattcgaa tctccgacac cgacctgtat 187020  
acggtatcac agctatctta aagccataca ttcggacaga cacatttcat ttccatgta 187080  
cgacgatctc atagaacagt gccatctatc gatggagcgt aaaagtaaac tcgtcgacaa 187140  
agcactcaat aaattagagt ctaccatcgg tcaatctaga ctatcgtatt tgcctccgga 187200  
aattatgccc aatatcatct aaacagtatg ttgtacggaa agaaccatta caaatattat 187260  
ccatgataga aagaaaatat ctatatgatt ggagaagtag gaaacaggaa caagacgacg 187320  
attactacat tattaaatca tgaagtccgt attatactcg tataatattgt ttctctcatg 187380  
tataataata aacggaagag atatagcacc gcatgcacca tccgatggaa agtgtaaaga 187440  
caacgaatac aaacgccata atttgtgtcc gggaacatac gcttocagat tatgcgatag 187500  
caagactaac acacaatgta cgcctgtgtg ttcgggtacc ttcacatctc gcaataatca 187560  
tttaccgct tgtctaagtt gtaacggaag acgcgatcgt gtaacacgac tcacaataga 187620  
atctgtgaat gctctcccgg atattattgt cttctcaaag gatcatccgg atgcaaggca 187680  
tgtgtttccc aaacaaaatg tggaaatagga tacggagtat ccggagacgt catctgttct 187740  
ccgtgtggtc tcggaacata ttctcacacc gtctcttccg cagataaatg cgaaccgta 187800  
cccagaaata cctttaacta tatcgatgtg gaaatlaacc tgtatccagt taacgacaca 187860  
tcgtgtactc ggacgaccac taccggtctc agcgaatcca tctcaacgtc ggaactaact 187920  
attactatga atcataaaga ctgtaatccc gtctttcgtg aggaatactt ctccgtcctt 187980  
aataaggtag caacttcagg tttctttaca ggagaaaggt gtgcactctg aatttcgaga 188040  
ttaaatgcaa taacaaagat tcttctcca aacagttaac gaaagcaaag aatgatacta 188100  
tcatgccgca ttcggagaca gtaactctag tgggcgacat ctatatacta tatagtaata 188160  
ccaatactca agactacgaa actgatatac tctcttatca tgtgggtaat gttctcgatg 188220  
tcgatagcca tatgcccggg agttgcgata tacataaact gatcactaat tccaaacca 188280  
cccacttttt atagtaagtt tttcaccat aaataataaa tacaataatt aatttctcgt 188340  
aaaagtagaa aatatattct aatttattgc acggtaaagg agtagaatca taaagaacag 188400  
tactcaatca atagcaatta tgaacaata tatcgtcctg gcatgcatgt gcctggcggc 188460  
agctgctatg cctgccagtc ttcagcaatc atcctcatcc tccctcctgt gtacggaaga 188520  
agaaaacaaa catcatatgg gaatcgatgt tattatcaaa gtcacaaagc aagaccaaac 188580

-continued

---

```

accgaccaat gataagatTT gccaatccgt aacggaaatt acagagtccg agtcagatcc 188640
agatcccagag gtggaatcag aagatgattc cacatcagtc gaggatgtag atcctcctac 188700
cacttattac tccatcatcg gtggaggtct gagaatgaac tttggattca ccaaagtcc 188760
tcagattaaa tccatctcag aatccgctga tggaaacaca gtgaatgcta gattgtccag 188820
cgtgtcccca ggacaaggta aggactctcc cgcgatcact catgaagaag ctcttgctat 188880
gatcaagac tgtgaggtgt ctatcgacat cagatgtagc gaagaagaga aagacagcga 188940
catcaagacc catccagtac tcgggtctaa catctctcat aagaaagtga gttacgaaga 189000
tatcatcggT tcaacgatcg tcgatacaaa atgcgtcaaa aatctagagt ttagcgttcg 189060
tatcggagac atgtgcaagg aatcatctga acttgaggtc aaggatggat tcaagtatgt 189120
cgacggatcg gcacttgaag gtgcaaccga tgatacttca ctcatcgatt caacaaaact 189180
caaagcgtgt gtctgaaatcg ataactctat tcatctgaaa ttggatgagt aggggttaatc 189240
gaacgattca ggcacaccac gaattaaaaa agtgtaccgg aactatatt cgggtttgca 189300
aaacaaaaat gttcttaact acattcaca aaagttacct ctccgactt cttctttttc 189360
tgtctcaata gtgtgatcag attatgacac tattectatt cctattccta tttcctttca 189420
g                                                                                   189421

```

---

What is claimed is:

1. The attenuated vaccinia virus strain K<sub>V</sub>AC103 (Korean Culture Center of Microorganisms [KCCM] accession number KCCM11574P) which has a nucleotide sequence represented by SEQ ID NO: 1.

2. An immunogenic composition for inhibiting or treating symptoms associated with a poxvirus infection, the composition containing the attenuated vaccinia virus strain K<sub>V</sub>AC103 (accession number KCCM11574P) of claim 1 as an active ingredient.

3. The composition of claim 2, which contains at least one pharmaceutically acceptable carrier or excipient.

4. The composition of claim 2, wherein the attenuated vaccinia virus strain K<sub>V</sub>AC103 is one attenuated by subculture.

5. A method for inhibiting or treating symptoms associated with a poxvirus infection in mammals excluding humans, the method comprising a step of administering the composition of claim 2 to the mammals.

6. An immunogenic composition for inhibiting or treating symptoms associated with a poxvirus infection, the composition containing the attenuated vaccinia virus strain K<sub>V</sub>AC103 (accession number KCCM11574P) of claim 1 as an active ingredient and at least one pharmaceutically acceptable carrier or excipient.

7. The composition of claim 6, wherein the attenuated vaccinia virus strain K<sub>V</sub>AC103 is one attenuated by subculture.

8. A method for inhibiting or treating symptoms associated with a poxvirus infection in mammals excluding humans, the method comprising a step of administering the composition of claim 6 to the mammals.

9. An attenuated vaccinia virus, wherein the genome of said attenuated vaccinia virus comprises a nucleotide deletion from 15,195 to 34,632 and from 139,978 to 142,484 as compared to SEQ ID NO: 7.

\* \* \* \* \*